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THE CAVALRY JOURNAL



JULY-AUGUST, 1938

*The Mechanized Cavalry
Takes The Field*

CAVALRY COMBAT

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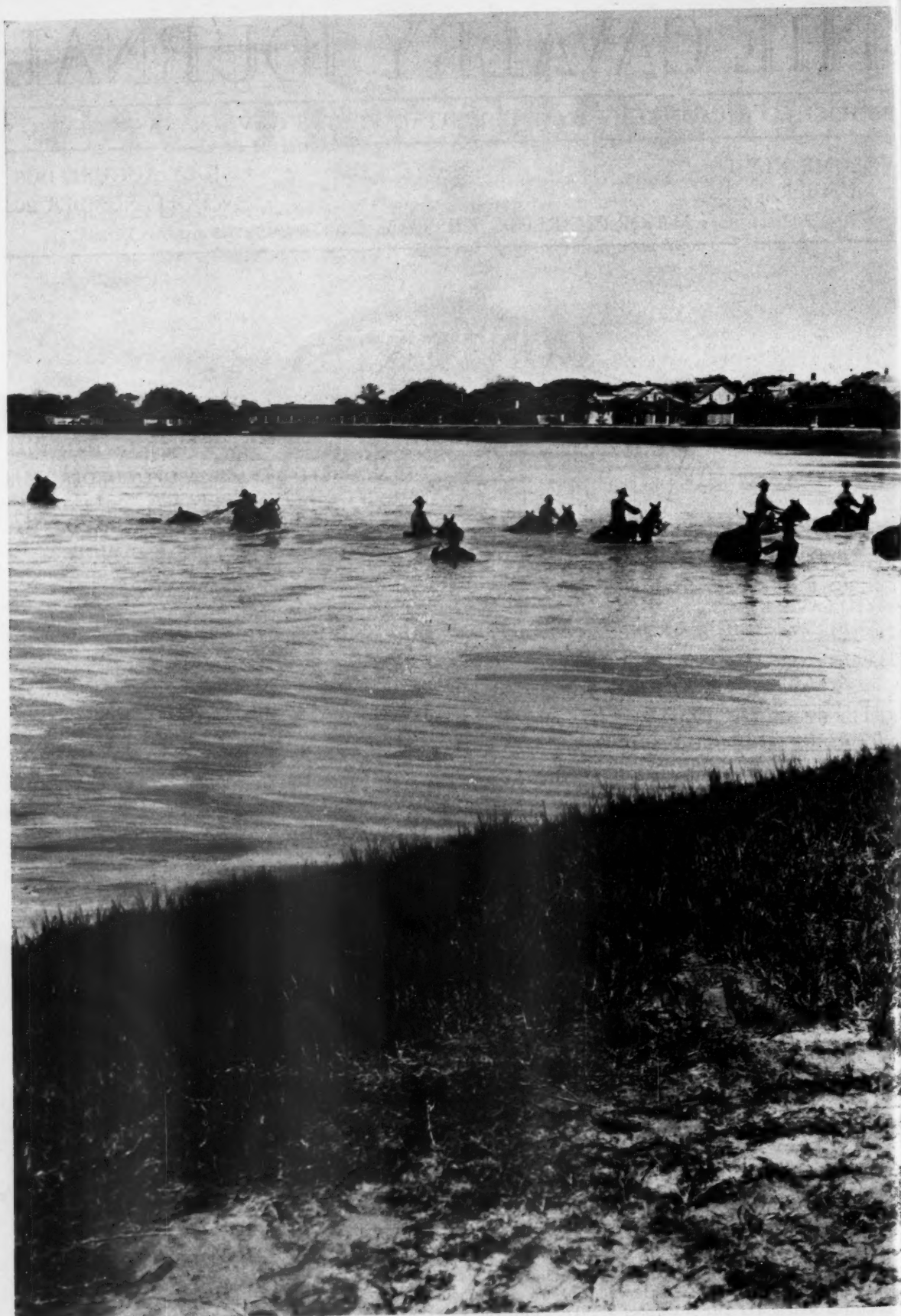
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CAVALRY MOBILITY

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The Mechanized Cavalry Takes The Field

On the twentieth of May, 1938, the 7th Cavalry Brigade, commanded by Brigadier General Daniel Van Voorhis, started a seven hundred mile march through Kentucky, Tennessee, into Georgia, and return, constituting the first march of any considerable length in which the mechanized cavalry brigade was equipped with its new vehicles. Three days and one night were utilized for the march, which actually required forty-one marching hours, including halts.

Considered from a training point of view, the march provided unsurpassed facilities. As a real test of the modern equipment of mechanized cavalry, the march indicated that the equipment is generally satisfactory. The control of the brigade by means of radio, motorcycle messenger, signaling, from the air, and by leading, varying from the first day when the regiments were separated by more than eighty miles of Kentucky countryside, until the last morning when, at daylight, the entire brigade was launched in an offensive against the 10th Infantry Brigade on the military reservation at Fort Knox in the Corps Area Commander's annual tactical inspection, demonstrated in an emphatic manner the importance of communication. From all points of view, the exercise proved itself well worth while.

For the march, it was assumed that a coalition of hostile powers had effected landings on the Atlantic seaboard at Boston, New York, and Norfolk. A hostile light mobile force was reported to have landed at Charleston, South Carolina, on Thursday, penetrating inland, presumably in the direction of Fort Knox, Kentucky. Upon receipt of the above information, the Commanding General, 7th Cavalry Brigade, was directed to march rapidly southeastward, gain contact with the hostile force, and delay it.

From a study of the map, it appeared probable that the hostile mechanized force would march northward to a concentration somewhere in the Chattanooga-Knoxville-Asheville area. This estimate of the hostile commander's intentions was confirmed Thursday night by information received from the 12th Observation Squadron, which was performing reconnaissance missions for the mechanized cavalry.

The start was auspicious. Early Friday morning, the brigade assembled at the initial point where several streets converge at Civic Center like the spokes of a wheel. Each

regiment or group pulled up on its assigned street, and halted with the commander's group at the head of the column. The 12th Observation Squadron droned menacingly overhead. Two minutes before the designated hour of departure the radio reported that everything was ready. Five hundred motors roared, guns bristled from every vehicle, from each turret protruded the head of a helmeted commander, and through the ports could be seen the grim visage of the drivers. The 7th Cavalry Brigade was poised, ready to strike deep into the South at the mythical invader who had been reported the night before as landing at Charleston. Brigadier General Daniel Van Voorhis, after a final survey, gave the signal to move out and then took off in a command plane, and the only mechanized cavalry brigade in the United States started on its epoch-making march which was to serve as a severe test of its combat equipment, and confirm or refute the practices built up at Fort Knox over a period of several years for the operation of this newest of all weapons.

During the first day, the brigade commander controlled his command by radio from the air. The march southward was in two columns on a broad front for the purpose of making a strategic reconnaissance of the area in which the hostile troops were assumed to be advancing. The west column commanded by Colonel Bruce Palmer consisted of the brigade less the 13th Cavalry and Battery A, 68th Field Artillery. It rolled out of Fort Knox through Elizabethtown and Glasgow, Kentucky, and thence across the Tennessee line through Carthage and on to Cookeville. The east column commanded by Colonel C. L. Scott consisted of the 13th Cavalry and Battery A, 68th Field Artillery, Trains, Quartermaster, Ordnance and Medical Detachments. It marched through the foothills of the mountains in eastern Kentucky, touching Hodgenville, Columbia, Somerset and Monticello. Both columns threw their respective reconnaissance troops well out to the front and flanks on reconnaissance mission. During the day, the front covered by these two reconnaissance troops approximated two hundred miles. Late in the morning, difficulty was experienced in radio communication between the two columns. This was the only occasion during the entire march when, for any length of time, the radio failed. Throughout the day, rain fell frequently.

As the march through Kentucky continued on a broad



The 7th Cavalry Brigade on the march.

front, enemy activity (simulated) was disclosed in the Chattanooga-Knoxville area and was subsequently reported to the brigade commander. At the end of the day's march, the eastern column bivouacked in the vicinity of Monticello, Kentucky, while the western column had crossed into Tennessee and bivouacked near Cookeville. Although the bivouacs of the two commands were separated by nearly one hundred miles, the brigade commander was in communication with both by means of airplane.

Friday night the brigade commander received information that the main bodies of the hostile mechanized force were marching on Chattanooga. He therefore ordered a concentration of his command to take place the next morning in the vicinity of Crossville, Tennessee, for a rapid advance on Chattanooga. The two columns converged at Crossville at exactly the designated hour and then marched southward along the valley of the Tennessee River through Chattanooga into Fort Oglethorpe, Georgia, where camp was established over Sunday, and the tactical situation terminated for the week-end.

The entrance of the brigade into Chattanooga was somewhat different from the arrival in that Tennessee city of the Union forces seventy-five years ago. As the troops roared through the city, one could not help but visualize the possible results that might have obtained had a force of this composition been available to either army in the Civil War days. What a strange spectacle it would have been to those soldiers of a past age had they been able to look down from Lookout or nearby Signal Mountain on

the "hell buggies" of the mechanized cavalry as the latter thundered through the city and on south into Georgia.

The week-end stay at Fort Oglethorpe was replete with many pleasant incidents, starting with the escort of the Scout Car Platoon of the 6th Cavalry, which met the command in Chattanooga, and led it on out to the Post. Colonel George Dillman, the commanding officer, and personnel of the 6th Cavalry provided a delightful welcome to their brother cavalymen from Knox, virtually turning the post over to them. A feature of the stay was a polo game in which the horse cavalymen handed a defeat to the mechanized visitors. Although it was suggested that an extra period be played on motorcycles, this attraction was deferred until a later date.

While at Fort Oglethorpe, the mechanized cavalry which had been sent southward to intercept the hostile force reported to have landed at Charleston, changed to the side of the hostile coalition and took over the rôle of the invading mechanized command heading for Fort Knox. This then was the situation which required the 7th Cavalry Brigade in bivouac at Fort Oglethorpe Sunday night to march northward early Monday morning on Nashville. Leaving Chattanooga and marching in regimental serials without excessive distance, the brigade skirted the foot of Lookout Mountain, followed the south bank of the Tennessee River, crossed the river and started a slow, winding ascent of the mountains to Monteagle, during which the head of the column crawled along at a rate of about fifteen miles an hour, so that the twisting and turning column behind could keep closed up. Although

a halt for refueling, which was made three hours out of Fort Oglethorpe, found the command still in the mountains, the fuel trucks soon came up despite the hard going, and the delay awaiting them was not as long as might have been expected. Monday afternoon the skies opened up and everyone took a thorough soaking. A number of motorcycles cut out during the rain due to wet coils, but resumed later when dry. There was some apprehension upon arrival at the camp site at Nashville lest the standing might not be firm enough for the heavy vehicles if the rain were to continue through the night. The next morning, however, all vehicles rolled out of the bivouac without incident.

It was at this bivouac in the Nashville Fairgrounds that Captain John L. Ryan, Jr., 13th Cavalry, averted what might have been a serious accident. Seeing a heavy, driverless, commercial, gasoline tank-truck, which had been left standing on a hillside, break loose and start running amuck down the street into a crowded area at the Fairground gate, he opened the throttle of the solo motorcycle on which he was leading the heads of columns into camp, overhauled the run-away truck, leaped into the driver's seat, and being unable to check the momentum of the heavy vehicle, guided it into a tree at the side of the road. As a result of this quick action, no one was hurt.

Tuesday morning at Nashville definite information was received by the mechanized cavalry brigade commander to the effect that there was considerable activity in the hostile concentration area: Dayton-Indianapolis-Terre Haute. Just after noon a plane of the 12th Observation Squadron, returning from a reconnaissance of the hostile concentration, reported by radio and dropped message that hostile motor columns had been observed moving southward from the concentration area toward the Ohio River.

Based upon this information, General Van Voorhis immediately dispatched the 12th Observation Squadron to reconnoiter the Ohio River from Cincinnati, Ohio, to Cairo, Illinois, with the mission of reporting any hostile crossing. Shortly thereafter both reconnaissance troops of the brigade were ordered to proceed at once on a reconnaissance of the Ohio River from Carrollton, Kentucky, to Henderson, Kentucky, a front of about two hundred miles. At this point, attention is invited to the fact that the flank reconnaissance detachments, in order to reach the Ohio River at the extreme limits of the zone assigned for reconnaissance, had to advance a distance by road just under three hundred miles.

Following the aerial and ground reconnaissance, late in the afternoon Tuesday the brigade moved out of bivouac in two columns to advance northward under cover of darkness by highways 31 W and 31 E. After crossing the Tennessee boundary into Kentucky, information was received by radio over the reconnaissance net that a hostile force of considerable size had crossed the Ohio River at Louisville during the evening and was moving south toward Fort Knox. Inasmuch as Fort Knox had been designated as the objective of our mechanized cavalry and

the hostile troops had now been located approaching that area, the brigade commander thereupon ordered both reconnaissance troops to concentrate their efforts in the vicinity of the military reservation.

Pushing rapidly northward, through Goodlettsville (Tennessee), Bowling Green, and Horse Cave (Kentucky), the 13th Cavalry with Battery A, 68th Field Artillery and attached troops, at 12:30 A.M. converged just south of Elizabethtown with the 1st Cavalry and 68th Field Artillery which had been driving forward through the night along the route: Gallatin (Tennessee)-Glasgow (Kentucky)-Hodgenville, to effect the junction of the two commands. The arrival of both columns at the designated point at the designated moment after 150 miles of night marching illustrates the accuracy with which the march of mechanized cavalry can be calculated.

Thus, with his command concentrated and disposed tactically for action, and the efforts of his reconnaissance agencies intensified, the brigade commander resumed the advance on Fort Knox protected by a small covering force in his front. Soon the details of the hostile situation began to develop and, when the command reached a point four and one-half miles south of Fort Knox, the disposition of the hostile brigade had become sufficiently known to justify plans for the assault; whereupon the brigade was halted, the subordinate commanders assembled, and the orders issued for the attack.

In brief, the 1st Cavalry, with one squadron of the 13th Cavalry and Battery B, 68th Field Artillery attached, moving under cover, was to deliver the main blow in a northerly direction and in general along the Wilson Road. The 13th Cavalry, less one squadron, but with Battery A, 68th Field Artillery attached, was to support the attack of the 1st Cavalry, also by moving under cover to the hostile right flank and there assaulting in a direction converging with the attack of the 1st Cavalry. The 68th Field Artillery, less the two attached batteries, was to support the attack of both regiments from a position just north of the reservation south boundary. The 12th Observation Squadron was to conduct battle reconnaissance, identify and designate the hostile main force, and provide for artillery adjustment. All subsequent movements of vehicles from this point were made without lights, and the attack was timed to take place just before daylight.

The initial phase of the attack went off as planned. The "accordian defense" put up by the 10th Infantry Brigade, commanded by Brigadier General W. K. Naylor, was based on a disposition of the hostile infantry along an outpost line of defense in concealed groups manning anti-tank guns; a few hundred yards in rear of this was another line of concealed groups placed opposite the intervals in the first line; somewhat behind the second line was a third line with groups similarly equipped and located; still further in rear was the brigade reserve with motor trucks available to transport it to a threatened locality. The supporting artillery was placed so as to be able to bring down concentrations on all avenues of approach. This defense was based on full utilization of anti-tank weapons and was

designed to deny the mechanized cavalry any targets consisting of sizable groups of personnel armed with rifles only. Out to the front, flanks, and rear, hostile radios were posted on all avenues of approach to give timely warning of the mechanized cavalry advance. It is believed that this system of defense against mechanization should be given further consideration throughout the service.

As the attack was launched, the brigade commander with his command group, followed its progress by means of radio and motorcycle messenger. After the main assault had passed through the hostile lines (with the inevitable casualties had there been bullets) and, when the two regiments had converged in rear of what was taken to be the hostile main forces, the brigade commander ordered the assault of a second objective with the direction of attack almost completely reversed. Preceded by an artillery preparation, both regiments swung around and attacked in the opposite direction, again passing through any hostile lines encountered. As the second objective was reached, the Corps Area Commander terminated the exercise, and the mechanized cavalry troops returned to their respective barracks, tired but satisfied that their training over the five-day period would constitute another chapter in the development of mechanized cavalry in the United States. To

all who participated, it was apparent that in view of the last night's activities, it might be considered a normal mission for mechanized cavalry in bivouac at dusk to make a night march and attack at daylight 150 to 200 miles away.

Since the march constituted a new experience for a large number of participants and observers, it is considered natural that there should have resulted many comments covering a wide field. It may be pardonable, therefore, for the writer to include some comments of his own, and by others, as follows:

MAINTENANCE IN THE FIELD

One of the purposes of the march was to test the sufficiency and efficiency of the mechanized equipment. A few comments, therefore, on the performance of the motors and motor vehicles may not be inappropriate at this point.

In preparation for the march, a thorough check was made of the tires and tracks of all vehicles, and necessary replacements accomplished. Careful mechanical inspections, lubrication, and service were given each vehicle. Special attention was given to: wiring, points, strainers, sediment cups, spark plugs, loose and missing bolts and parts, light globes, brakes, and replacement of worn run-



The gunner of a mechanized cavalry combat car opens up on a hostile airplane in the annual corps area tactical inspection at Fort Knox.

ning gear. Each unit was issued small additional stocks of motor repair parts for unit maintenance and for minor vehicle repairs.

"On the march," quoting the report of the Brigade Motors Officer, "maintenance and repair were performed by the car crew, the organization maintenance personnel, the regimental maintenance platoon, and by the detachments of the 19th Ordnance Company and Company E, 5th Quartermaster Regiment. Whenever a vehicle indicated that it was not operating satisfactorily in all particulars, the vehicle fell out of column in order that the mechanical trouble might be diagnosed and repairs made before any further damage occurred. Minor repairs which could be accomplished quickly were made by the organization mechanics, while the more serious jobs requiring a longer time were taken over by the regimental or brigade maintenance detachments."

With the thought that the typical mechanical failures on a day's march of the 545 vehicles might be of interest, there are listed below those of the combat vehicles on the second day:

Armored Cars

- One (1) blown head gasket.
- One (1) vapor lock.

Combat Cars

- One (1) transmission failure.
- One (1) broken gear shift lever.
- One (1) blown bogie.
- One (1) broken tappet.

Half Tracks

- One (1) thrown bogie wheel.
- One (1) freeze plug right bank fell out.

A typical night's maintenance work performed by the 19th Ordnance Company in bivouac, that of the third night, for example, was as follows:

- Repaired loose gudgeons and guides on one combat car.
- Replaced engine on one combat car.
- Repaired leak in one engine cooling tank (old type) on one combat car.
- Replaced clutch on half track.
- Relined brakes on half track.
- Installed steering column on half track.
- Welded and made certain parts for half track truck.

In summarizing the mechanical performance of vehicles, it must be pointed out that the functions of maintenance and repair by all echelons were outstanding. Furthermore, the march proved that the combat vehicle can be designed and manufactured to meet the operating requirements, instead of necessitating a compromise in operating requirements to meet the mechanical characteristics of the vehicle.

On the occasion of recent military activities in Europe, much was written in the press about the reported mechanical failures of the mechanized elements involved. While these reports may have been exaggerated, it can be accepted as factual that there were at least some mechanical casu-

alties. In the absence of definite figures, it might be considered idle conjecture to make any comparisons. But it is doubted that the mechanized elements, engaged on an advance of less than half the distance of the march to Fort Oglethorpe and return, bettered the record of the 7th Cavalry Brigade of reaching the final objective with 99.97 per cent of the vehicular strength with which the march was started. And, as a matter of interest, let it be recorded here that the two only vehicles of the 545 which were towed in to Fort Knox suffered mechanical failures of such a nature that they could have been repaired along the roadside and run into Knox under "their own steam" had not the failures occurred so near to the home station—15 or 20 miles away—as to justify bringing them on in to the shops without waiting to make the repairs in the field.

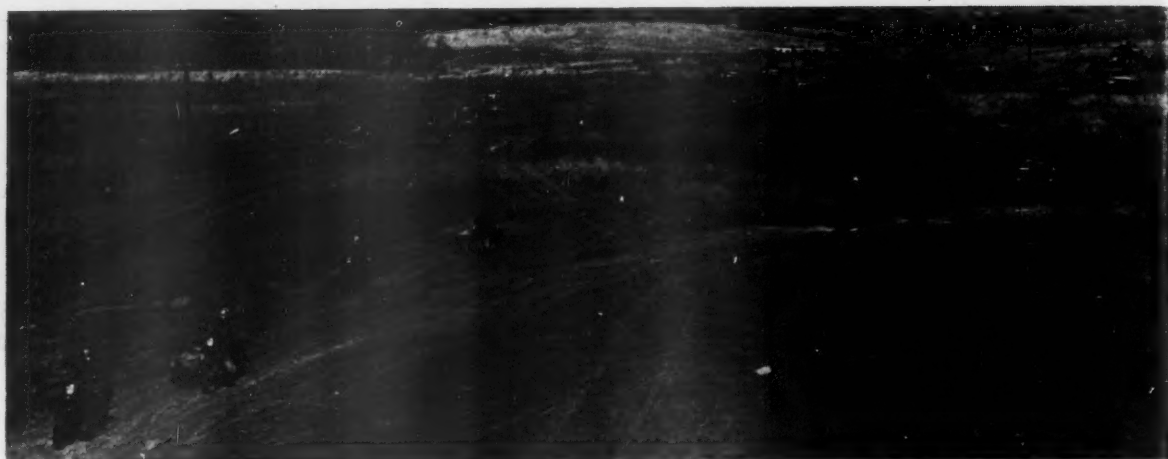
This is a repetition of the splendid record made by the mechanized cavalry in the Second Army Maneuvers of 1936, when it returned to Fort Knox from Michigan with every vehicle except one running under its own power. This one was a combat car in which a new engine could have been installed in the bivouac at Indianapolis, just as several engines of combat cars had been changed previously in the overnight bivouacs. Instead, the vehicle was towed in to Fort Knox with the column the next day. These maintenance records speak for themselves. Maintenance in mechanized cavalry is unquestionably a function of command and the splendid record in that field of endeavor reflected credit on all personnel since the entire command contributed to the remarkable achievement.

MARCHING MECHANIZED CAVALRY

Since the World War much attention has been devoted to marching in serials, particularly since the motor vehicle has come to play such an important part in armies. As might be expected, this march through Kentucky and Tennessee into Georgia and return afforded ample opportunity to try various methods of grouping vehicles on the road, and to study the advantages and disadvantages of each.

Starting out from Fort Knox, each of the two columns marched in four serials, with not to exceed ten minute intervals; a wheel and track serial in each cavalry regiment, an artillery serial, and a train serial. With such a grouping, each column covered considerable road space. Due to the extended length of the column, this type of marching, in which each serial commander is necessarily accorded some latitude, has proven to be best suited to an administrative march where sudden contact with the enemy and rapid development are not anticipated.

On the second day after the two columns had converged at Crossville, Tennessee, the entire brigade marched as one command, each regiment and the trains constituting a serial closed up without distance on the serial ahead. While this latter method does not allow squadron and troop commanders any latitude in marching, but requires instead that they keep closed on the organization in front of them, it does result in permitting the regimental commander at all times to have his command in hand, which



"The War is Over!" Squadron of mechanized cavalry returning to barracks at Fort Knox after "Recall" had been sounded.

is not the case if each troop or squadron is marching more or less independently at four or five minute intervals.

On the third day, from Fort Oglethorpe, Georgia, to Nashville, Tennessee, the command again marched in regimental serials without excessive distance.

Finally, on the night march from Nashville, Tennessee, to Fort Knox, Kentucky, in which a tactical situation was involved, the brigade marched northward in two columns, each column tactically disposed, and closed up ready for action. Although it is admittedly difficult for the combat elements of the regiment to march without distance, due to frequent irregularities in the rate of march of the rear vehicles of the element they are following, nevertheless experience has proven that it can be done with practice. And, where hostile contact is imminent, it follows that closed-up marching must be the rule, in order that the commander may not be delayed in disposing his command for combat.

Many cavalrymen can call to mind past marches of horse cavalry in which troop commanders have been given so much latitude that a squadron march has virtually resolved itself into several independent troop marches. The advantages and disadvantages of this independent marching are too well-known to discuss, but suffice it to say that both are intensified in mechanized cavalry.

REFUELING

The manner in which the command was marched, as would be expected, had a direct bearing on the refueling of the vehicles. For example, on the first day when the elements of the east and west column were strung out in serials with the trains marching well to the rear, approximately one-half hour was required after the halt was ordered for the fuel trucks to reach the leading serial. This could be remedied by breaking up the train and marching the fuel trucks in rear of their respective squadrons, provided, of course, the trucks could keep up with the combat elements, which requirement, with the present type truck, presented some difficulty. When the regiments were

marched as a unit, refueling was simpler because, with the distance between troops and squadrons reduced to the minimum, the trains were more quickly available. From the above, it can be seen that refueling will, of necessity, continue to be a consideration affecting the method of marching, until each vehicle of the command is designed so that it can make a full day's march on the contents of its own fuel tank.

CONTROL OF MECHANIZED CAVALRY FROM THE AIR

During the march southward, General Van Voorthis exercised command and followed the progress of the advance of the mechanized cavalry from a command airplane, using radio and dropped messages. At other times, staff officers and observers also took to the air, flying over the columns and maintaining communication with the ground troops. The advantages of utilizing aircraft for command purposes in mechanized cavalry are commented upon herewith by Colonel George S. Patton, Jr., Cavalry, who, as a representative from the Cavalry School, observed certain phases of the march from the air:

"Owing to the speed of mechanization and the necessity of moving it over every available road, the question of keeping touch between heads of columns is as important as it is difficult. Lateral patrols may not be useful owing to lack of roads and, in any case, would have to move at an undue and perhaps impossible speed to rejoin. When and if radio works, it will solve the difficulty; but one should remember that, in addition to its peculiar idiosyncrasy of stopping at important times, the presence of enemy radio will exert a very cramping influence through jamming."

"The obvious answer then to the maintenance of liaison between the several columns of the mechanized cavalry command is the use of an observation plane. An observer from such a plane can readily pick up the heads of columns and, through the use of radio or dropped messages (due to gravity, dropped messages always arrive), maintain contact.

"To secure the best results, the observer in the plane should be a member of the mechanized command, and moreover, he should be habituated to the duty for, even at very low altitudes, it is difficult to differentiate between the various types of fighting vehicles. A refinement which would materially aid in such identification would consist of painting the tops of vehicles with some arbitrary symbol or, if this should prove too enticing to hostile aviation, the symbol could be painted on a roller panel and displayed on request from the plane.

"Another situation in which air control will be almost vital is in connection with enemy demolitions which will certainly be encountered and invariably demand a change of direction and the selection of a new route. In carrying out such a move the plane will not only transmit the orders and possibly a marked map to each column but also through liaison with the reconnaissance troops help to locate such new routes or bridges.

"Finally, when contact is imminent either the commander or his executive must be in the air in order to maintain that instantaneous personal touch with the enemy situation that is demanded for the successful employment of rapidly moving mechanized units. General Van Voorhis set an enviable example in this respect which all other mechanized commanders should seek to emulate."

AIR-GROUND COMMUNICATION

The march afforded excellent opportunity for a practical test of the air-ground communication indicated above. This included communication by radio, by dropped messages, and by panel. In particular was the dropping of messages effective. A plane with a drop message would fly over the column in march, signalling to the commander that a message was about to be dropped and then, after circling, drop the message well in front of the commander's group. Motorcyclists would then race forward, pick up the message, and, returning to the command car, hand it to the commander, whose pace would not have been slackened by the mechanics of the pick-up. On one occasion in the mountains of Tennessee, the message was dropped just as the head of the column passed around a turn over the top of the mountain. The airplane flew low, in its attempt at accuracy, but the message landed in a tree top just off the road. In a jiffy, a motorcyclist was off his solo and up the tree to retrieve the message, delivering it before the aerial observer, who had seen the dilemma, could drop a second message. At night, also, was it possible to utilize this means of air-ground communication by putting the searchlights of the leading vehicles on the airplane as it flew over the column. The display of identification panels on the march was also accomplished without incident.

FERRYING COMBAT CARS

An interesting episode of the march occurred at Burnside, Kentucky, when the eastern column arrived at a bridge over the south fork of the Cumberland River

which, at this point, was about 280 feet wide. Although the bridge previously had been reconnoitered by staff officers and pronounced safe for the crossing of the command and, although it was thought that the preliminary contacts with the state police had indicated that there would be no objection to the crossing, when Colonel C. L. Scott arrived at the bridge on the first day's march, he was confronted with a local officer who denied the use of the bridge to the heavier vehicles of the command. There ensued a half-hour's conference with the police who were obdurate, followed by telephone calls to the county and state highway officials, all without avail, as a result of which the combat cars were crossed on a nearby ferry. Speaking of the incident, Colonel Scott said:

"During this telephoning, a reconnaissance was made of a little country ferry which, luckily, was nearby. The Regimental Commander first crossed back and forth in his own combat car, which loading made it obvious that the ferry could carry only one combat car per trip, instead of two as had been indicated as a possibility.

"Also, during this telephoning and reconnaissance, all of which concerned the weight and the crossing of combat cars only, the wheeled vehicles were moved across the bridge to continue on into camp, and the combat car troops were cut out of the column onto the road to the ferry.

"After deciding to utilize the ferry, the operation was very simple. We merely drove the cars on the ferry one at a time without dismounting the crews, and the ferry personnel handled all the work connected with the crossing. Each round trip took an average of three minutes. Time consumed for actual ferrying: 42 cars times 3 minutes equals 126 minutes, or 2 hours 6 minutes.

"The wheeled vehicles had already been sent on into camp at Monticello after crossing the bridge and the combat cars followed by squadron. The total delay for the different units was about as follows:

"Wheeled vehicles: about 20 minutes.

"The last combat car squadron: about 2 hours 45 minutes, including arguments and reconnaissance of the ferry and approaches."

The incident served to emphasize the fact that a river or sizable stream constitutes an obstacle for mechanized cavalry and will occasion a delay. In this case, resourcefulness and a nearby ferry solved the problem without too serious consequences.

"KEEP THEM ROLLING"

To the observers, one of the most interesting features of the entire march was the smoothness with which the brigade went into bivouac. Upon arriving at the site of the bivouac, the column without halting would leave the road and "flow" into the area, each troop or battery executing front into line as its leading vehicle arrived at its designated post. While it is true that an advance detail, which had gone ahead to lay out each camp, was present to guide the arriving organizations into place, nevertheless, only by considerable practice could each of the five hundred or

more vehicles have gone directly to their position in the bivouac park without necessitating the halting of any of them. This "flow" from the march into bivouac, and even through the approach march and into the development for combat, is emphasized in the mechanized cavalry as highly essential if full advantage is to be taken of the mobility of the command. Every effort is made to "keep the cars rolling."

RECONNAISSANCE PRELIMINARY TO THE ASSAULT

A comment made by an observer just as the daylight assault jumped off Wednesday morning may be of general interest. He indicated surprise that the attack of the mechanized cavalry was "launched without preliminary reconnaissance." Had he been in the command car with the Brigade Commander during the hours on the road as the mechanized cavalry marched northward from Nashville, it is doubtful if he would have made such an observation. Riding with the commander, he would have been aware of the wide extent of the hostile information which came pouring in during the night as the attackers approached Fort Knox. And, inasmuch as this belief that mechanized cavalry rushes into the assault "without preliminary reconnaissance" has also been expressed on other occasions, it might be timely to digress long enough to look into the matter.

As a result of the facilities available, the commander of mechanized cavalry has an unusual opportunity to secure information of the hostile forces opposing him. First of all, his observation aviation precedes him into

the hostile area and, by virtue of the fact that the air-ground radio communication is so highly developed in mechanized cavalry as a result of the voice or key radio facilities provided by the command car either in motion or at a halt, this hostile information obtained in the air is immediately and continuously available to the commander. There is no interruption in the flow of this hostile information resulting from delay in transmission. In the operations against the 10th Infantry Brigade described in this article, the first hostile information transmitted to the mechanized cavalry commander was received four hours prior to the attack. This reconnaissance by the observation aviation depicting the hostile situation continued not only until the assault was launched, but subsequently followed each mechanized element through to its objective. As an illustration of the military value of these messages from the 12th Observation Squadron operating with the mechanized cavalry, some samples are quoted herewith:

"Hostile trucks are moving south along Dixie Highway. Considerable infantry activity in vicinity of OP-6 extending one mile northeast and west."

"Your combat vehicles are in contact with strong infantry opposition 1,500 yards north of OP-6. Will warn you of location with red flare."

"Hostile infantry 500 yards north of OP-6 and 1,000 yards east of OP-6."

"McMahon Hill is strongly held by infantry. Hostile main line of infantry resistance is parallel to Muldraugh Rifle Range targets and 1,000 yards east of that



Combat cars of the 13th Cavalry are ferried across the Cumberland River.



The 7th Cavalry Brigade in camp.

line of targets. 10 men on north flank, 35 men on south flank."

"Hostile line is in an L shape 1,500 yards north of OP-6. Center is 1,000 yards east of Muldraugh Target Range then goes south 600 yards."

"Am doing figure eight over infantry main line of resistance. Inform all concerned."

The fact that some of the aerial reconnaissance indicated above was made at night attests to its excellence.

Next, in addition to aerial reconnaissance, the ground reconnaissance of mechanized cavalry is normally dispatched an hour or two ahead of the main body, and advances rapidly by available roads to the area in which the enemy is expected or until the hostile forces are actually encountered, when a close, detailed reconnaissance is initiated. Marching faster than the main body, this ground reconnaissance should be in contact with the enemy at least an hour or two before the arrival of the main body, if the hostile information sent back to the commander is to arrive in time to be of maximum value. It may be possible that the ground reconnaissance can completely encircle the hostile force and report its entire contour; this was done in the Second Army Maneuvers in Michigan summer before last, when the reconnaissance detachments of Troop A, 1st Cavalry, completely encompassed the Sixth Corps. Upon arriving in the vicinity of the enemy, since distance is not as great an obstacle to mechanized troops as to other less mobile troops, the reconnaissance elements are not restricted by time and space factors to any localized area, such as the right flank or the left flank, but by virtue of their mobility, also attempt to work along the entire front and rear. On this particular occasion, both reconnaissance troops of the brigade were dispatched from Nashville by the brigade commander to precede the command northward toward the Ohio River and reconnoiter the enemy wherever encountered. This disposition resulted in a possible maximum of sixteen ground reconnaissance patrols, each of two cars, being assigned to the reconnaissance mission at hand. It would

not seem unreasonable therefore to expect such a reconnaissance force with more than three hours at its disposal to locate at least the main elements of a single hostile brigade, restricted as the latter was to a definite and not large portion of the Fort Knox Military Reservation. In the radio log of the brigade commander's command car that night are entered twenty radio messages from the mechanized ground reconnaissance, not to mention any additional motorcycle messages, describing the hostile situation. To quote a few of these radio messages may be of interest:

"Hostile infantry estimated as a battalion is in position on ridge south of Muldraugh Target Range and 400 yards east of 500 yard butts. See red rocket."

"Hostile outpost located on Forest Hill."

"Louisville-West Point Road is clear. No enemy troops at West Point bridge. Am located at Meadowlawn. Request instructions."

"Three hostile tanks are at northeast corner of golf course."

"There is a manned road block on Hodges Road at Dixie; also at entrance of Wilson Canyon."

"About 15 infantrymen in trucks are in vicinity of Grahampton."

Reference to a map of Fort Knox will indicate that the several sample messages quoted above, which are only a few of the total, pertain to hostile information obtained on the entire periphery of the hostile brigade—north, south, east, and west. Again, one of the factors which permit this close contact between the mechanized cavalry reconnaissance elements, and the brigade commander, is the efficient radio system which does not require a halt of five or ten minutes for a set up; instead the radios are continuously in operation, whether the commander or the reconnaissance agency is in motion or at a halt. At all times supplementing the radio communication, and sometimes completely replacing it, are the motorcycle scouts of mechanized cavalry. Not only are these motorcycle scouts used as messengers, but also are they valuable for

reconnaissance duties. For close-in reconnaissance in a situation in which the reconnaissance car has been halted, or if the mission requires it, the car crew dismounts and accomplishes its reconnaissance on foot.

Anyone who has seen the situation map of the mechanized cavalry brigade that Wednesday morning with the information of the hostile forces entered on it, together with the time of receipt of same, could get a pretty good idea of the area in which the 10th Infantry Brigade was disposed, the general location of its main forces, some detail of the outpost system, the position of part of the artillery, a truck bivouac and the whereabouts of two or three of the six tanks of the 5th Tank Platoon. It is true that this information of the hostile disposition could have been much more detailed with the resultant advantage to the attacker, but valuable time would have been lost in acquiring this information. And, during the period required to obtain it, every precious minute of the time would have been working for the defender. All of which leads to the conclusion that mechanized cavalry often cannot afford to march rapidly over a considerable distance to the scene of the fight, taking full advantage of its mobility, and then sit down to wait hours for detailed information of the exact location of every element of the hostile force. It would appear that it must take the risk of striking the enemy as soon as possible, and certainly before the hostile force is organized to receive the assault.

CASUALTY

The only serious accident of the march occurred on the first day out of Fort Knox as the west column cleared Glasgow, Kentucky. A broken right track of a combat car caused the driver to lose control of the vehicle which then turned over, killing the car commander, a gallant and veteran cavalryman, Sergeant Frank Bruno, Troop E, 1st Cavalry, who was riding in his accustomed place in the turret. Although two other members of the crew were injured, the driver brought the combat car into bivouac and, after a change of tracks, continued the march with the command. This would seem to contribute confirmation to the belief prevalent at Fort Knox that our American combat car should be large enough to carry a crew of four men. A crew of this size can suffer two

casualties and still function as a combat unit with gunner and driver; and three casualties and still have a driver left to bring the car home.

STATEMENT BY BRIGADE COMMANDER

Upon the return of the 7th Cavalry Brigade to Fort Knox, General Van Voorhis, the brigade commander, who has been closely associated with the development of mechanized cavalry in the United States since its beginning made the following statement:

"The seven hundred mile march of the 7th Cavalry Brigade has been very interesting and beneficial from many points of view.

"First, it gave us a splendid opportunity for testing the new vehicular equipment of the brigade, which equipment proved to be very satisfactory.

"Second, it afforded the commissioned and enlisted personnel of the brigade that excellent opportunity for training which can only be acquired in the field.

"Third, the march permitted experimentation in various methods of control of the mechanized cavalry brigade, both from the air and ground, that may have far-reaching effects on the future development of mechanization.

"In every respect were the maneuvers well worth while.

"The improvement made by the brigade during the march and field exercises was marked.

"It is well-known in the military service that training in the field is the most satisfactory of all types of training. This was no exception.

"The advantageous position which the United States occupies in the automotive world would seem to indicate that full utilization should be made of these available mechanical aids to modern combat. The service in the field of the 7th Cavalry Brigade has convinced me of the tremendous possibilities of an arm utilizing modern automotive equipment, not as a substitution for any of the basic arms as we know them but as an additional weapon with which the commanding general can more promptly and effectively accomplish his mission. When put to the severe test just given it, the mechanized cavalry brigade measured up to my fullest expectations."



TACTICALLY, there are only five elementary functions: to find, guard, hit, move and supply.—MAJOR GENERAL J. F. C. FULLER.

Cavalry: A Requisite

The Constant Factor Present in DECISIVE Operations of the World War

Anonymous

PART II

THE RUSSIAN FRONT

As the defeat of Russia was the second objective of the Central Powers, that theatre of operations will be taken up at this time.

Russia planned to defend against Germany and concentrated at once two armies, Rennenkampf's and Samsonov's. Due to request of the Allies for Russia to attack and relieve the German pressure in France, Rennenkampf from the direction of Kovno attacked the Germans in East Prussia (see Map, page 302) and defeated General Priwitz's whole force (less the XX Corps).

Von Hindenburg then took command of the Germans in East Prussia. *By screening his movements from Rennenkampf with one cavalry division of two brigades*, he concentrated on and attacked Samsonov's Russian Army, which had advanced from Warsaw. The attack was a remarkable success, the Russian Second Army lost two of its four corps and the remnants fell back on Ossovietz.

In this battle the Russians had in the two armies, ten cavalry divisions. *The German cavalry division of two brigades was all that confronted Rennenkampf's twenty-four infantry and seven cavalry divisions.* With three cavalry divisions available, Samsonov placed two (6th and 15th) on his left (southwest) flank and one (4th) on his right flank with screening and reconnoitering missions.* The conclusion is axiomatic. The Russian cavalry was not used effectively, undoubtedly due to the fact that it was not given energetic missions by the Russian High Command. The lack of the Russian High Command to utilize

cavalry properly is very noticeable in nearly every operation of the war on the Russian Front.

Von Hindenburg followed up his success against Samsonov by attacking Rennenkampf north of the Masurian Lakes. The frontal attack was repulsed, but the enveloping movement through the Masurian Lake region against the Russian left flank succeeded, and two German cavalry divisions that formed part of this force, by a rapid advance on Kovno, threatened the lines of communication of the Russians, causing Rennenkampf to retreat across the Niemen River with a loss of more than 80,000 men.

The Germans followed up the victories at Tannenberg and Masurian Lakes with another offensive which had as its objective—Warsaw. General Rennenkampf decisively defeated a diverting offensive of the Germans in East Prussia, capturing 60,000 men and much artillery. This defeat did not stop Hindenburg from his intended advance on Warsaw. However, the German operations of October 16th-31st failed and Hindenburg was forced to retreat and seriously expose Silesia and the German frontier to Russian attack. The Russians had a great superiority of cavalry over the Germans in these operations. The operations of the Russian cavalry made Hindenburg feel his lack of that arm and he demanded and received the German I Cavalry Corps, 5 divisions, from the French Front in November and December of 1914. It might be appropriate here to give the following quotation of Marshal Hindenburg: "Cavalry will continue to be important. There were many times when I wished that I had more of it."

Von Hindenburg again in November took up the offensive and succeeded in securing a decided penetration in the Russian line and sent two corps, including 2 cavalry divisions, through the gap. The Russians succeeded in closing the gap, causing great loss to the Germans. In this operation the Russians still had a numerical superiority in cavalry.

In the southern part of the Russian Front the racial enmity between Russians and Austrians naturally brought the two nations to active operations in the latter part of August, 1914. Both sides planned offensives. The

*EDITOR'S NOTE: "Samsonov definitely tied the 4th Cavalry Division to Sensburg, and himself ordered the direction of their reconnaissance. This order, in fact, discloses the general idea about cavalry reconnaissance in the Russian Army. The main body of the cavalry was usually maintained far back and to a flank, whilst reconnoitering bodies were sent forward to long distances. There was no conception of sending forward the main body of the cavalry to back up their own reconnoitering parties. As a consequence, continuous touch with the enemy was never maintained, and if the reconnoitering elements did get into touch with the enemy they never managed to get their news back in time. There was much loss of effort in the relief of reconnoitering parties, and touch was lost for long periods."—TANNENBERG, *The First Thirty Days in East Prussia*—by Major General Sir Edmund Ironside.

Eastern Europe — 1914



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Austrians launched their grand offensive in the direction of Warsaw and Lubin. The Russians were not entirely prepared and at first the Austrian offensive met with success. However, the Third and Eighth Russian Armies soon countered and enveloped the Austrian right, causing the evacuation of Lemberg and a disorderly retirement of the Austrian right. The victory of the Third and Eighth Russian Armies brought into the offensive the two Russian armies that were hard pressed by the Austrian left. The battle became general with the result that a large force of Austrians were surrounded in Przemyśl and the remaining Austrians retreated rapidly into the Carpathian Mountains, leaving more than 400 guns and 100,000 prisoners in the hands of the Russians. The Russian cavalry, about 10 divisions, took a most active part in these operations and was, during the pursuit, advanced well toward Budapest. The Austrian cavalry that took part in this operation must have been less than ten divisions, the Austrian total, as some of the Austrian cavalry was acting against Serbia at the time.

In February, 1915, Marshal von Hindenburg took up a winter offensive against the Russians. It included an attack in East Prussia and an Austrian attack. The Russian Grand Duke Nicholas countered by attacking the Austrians capturing the fortified town of Przemyśl and with it 150,000 men and 1,050 guns.

In May von Falkenhayn launched an attack against the Russians on a 1,000 mile front. Mackensen from Austria defeated the Russians in his front and forced a retreat. Von Hindenburg in Poland and to the North was also successful and the Russian whole line was forced to retire into the interior of Russia. Six cavalry divisions grouped in 4 corps pursued the Russians. Due to Allied attacks in France and Italy, Germany stopped her Russian advance and that front stabilized.

In the spring of 1916 the Czar reorganized the Russian army after the defeat of 1915 and held the 1,000 mile front of the Central Powers. The Czar planned a grand offensive to start July 1st, but upon the request of the Allies to relieve the pressure on Verdun he began a limited offensive toward Kovno, March 18th. Later, June 4th, the Russians launched an offensive against the Austrians. In July the Russians attacked all along the line and created a grave situation for the Central Powers. In those operations cavalry took part on both sides. It will be noted that the German cavalry on the Russian Front had increased from one division in 1914 to ten divisions. However, the Russians had a superiority of cavalry throughout the war. At the beginning of March, 1917, just before the Russian Revolution, there were 39½ Russian cavalry divisions on the front from Riga to the Black Sea.

1917 witnessed the fall of Russia. The Czar's court became very corrupt and food riots took place in Petrograd. A "Provisional Government" was created with M. Kerensky as Minister of War. The Czar abdicated in favor of his brother, the Grand Duke Michael. The latter refused the throne.

In the spring, under the leadership of Kerensky, the

Russians resumed the offensive by attacking the Austrians, but the agitation by the Bolsheviks had taken hold of the army and destroyed its discipline and the success of the offensive was limited.

The Germans and Austrians countered in Galicia and routed the Russians. Kerensky appointed Kornilov Commander-in-Chief of the Russian Armies and the resistance immediately stiffened and the offensive was stopped.

The Germans then made a feint toward Petrograd by attacking and capturing Riga. Kerensky, who had become Provisional President of the Russian Republic, moved his capital to Moscow. Revolution gripped Russia. Lenin and Trotsky, Bolshevik leaders, came into power and the armistice of Brest-Litovsk, December 15th, was the result. A treaty of peace between Russia and the Central Powers was signed December 23d. Roumania also ceased hostilities and asked for peace with the Central Powers on December 9, 1917.

There was no decisive military operation on this front. The defeat of Russia was undoubtedly brought about by the Bolshevik Revolution. The following, however, can be said in connection with the operations on the Russian Front. Up until the Revolutionary movement in Russia began to have its effect on the army, the Russians were generally successful over the Germans and Austrians. As shown above, Russian cavalry took part in all operations and there can be no doubt that these operations would have been more decisive if the High Commanders of Russia had utilized their great numerical superiority in cavalry to the best advantage. Military attaches' reports and all authentic data obtainable show that the Russian cavalry, as cavalry, has obtained decisive results in action.

In 1916 the main objective of the Central Powers was the decisive defeat of Russia. Russia succeeded in preventing the gaining of this objective and their cavalry took a decisive part in their operations. A study of these operations will show that the Central Powers gathered all available cavalry at their disposal for this campaign and that when they attempted to use it in the decisive break that was made, it was not sufficiently strong to accomplish its objective.

In general, these operations on the Eastern Front from the cavalry point of view, show that the use of cavalry must be understood by the High Command and that masses of cavalry must be used at the critical moment to swing the pendulum toward decisive victory.

THE ITALIAN FRONT

For Italy to take the side of the Allies was a surprise and blow to the Central Powers. This addition to the Allies relieved France of protecting her southeast border and allowed her to use all her forces on what is known as the Western Front. The campaigns against Italy fell mainly upon the Austrians and were for the purpose of defeating Italy and overcoming the handicap mentioned above.

Italy declared her neutrality, August 3, 1914, but did not join the Allies until April 15, 1915. Italy attacked Austria in May, 1915, but the operations in this theatre

soon became position warfare and remained so until the end of the year.

The Austrians attacked Italy in May, 1916, and were seriously threatening the Italian army, but the battle of the Somme and the Russian attack on Austria caused the offensive to stop.

General Cardon launched a counter offensive in May, 1916, against the Austrians with considerable success. Later in the year, August, he renewed the offensive and improved the position gained in the spring.

During 1917 a campaign of propaganda by the Germans and Austrians aimed at Italy was so successful that many Italian soldiers at the front fraternized with the Austrians and agreed not to fight them. This condition created, the Austrians launched a surprise offensive, October 24th. The result was, as could only be expected, a great disaster for the Italians. They were forced to retreat in great disorder and with great losses. Nevertheless, the Italians finally held east of the Piava River. French and British troops were sent to bolster up the Italian army and in 1918 the world was to be astonished by a remarkable offensive carried out by the rehabilitated Italians.

The Italians, in 1918, planned to penetrate the Austrian line, striking at a critical point in the enemy lines of communication and launching the cavalry through the gap. The nine armies at the disposal of the Italians drove hard through the Austrian center with the object of capturing Vittorio and cutting off the supplies of the Austrian right wing in the mountainous Trentino region. By the evening of October 31st the break-through toward Vittorio had been made.

By October 31st the cavalry corps, 3 divisions, overcame the obstinate resistance of the Austrians and took up its part in the pursuit. The first mission of this cavalry was to reach the Tagliamento River before the enemy's retiring columns and prevent the destruction of the bridge over that river. The second and grand mission of the cavalry was the breaking up of the Austrian armies. Therefore, where bridges were found destroyed, the cavalry crossed the rivers and attacked the Austrians in position and in retreat whenever obstacles were placed in the way of closing the arteries of Austrian retreat to the east.

In addition to the operations of the cavalry corps, the 1st Cavalry Division was given the important mission of assisting in the capture of Vittorio. The success of the infantry in this operation was so complete that this cavalry division was promptly sent through the gap and turned over to the cavalry corps with the mission of pursuit and the closing of the avenues of retreat to the northeast through which the Austrians in the Trentino would have to go.

The results of the Italian offensive were, as you know, the fall of Austria-Hungary. The battle began October 24, 1918, and the break-through accomplished October 31st, when the cavalry went out in front. By 3:00 P.M., November 4th, the hour set for the cessation of hostilities, 300,000 prisoners had already been counted. When all those who had been cut off by the Italians had been

counted, the total prisoners approached 700,000 men; 7,000 guns were left in Italian hands.

In six days from October 29th to November 3d the cavalry had closed every avenue of retreat open to the Austrians. The 1st and 3d Cavalry Divisions covered distances varying from 125 to 168 miles, fighting their way and at times without food or forage. The 1st Cavalry Division alone in the defiles of the mountains cut off three Austrian divisions, which they disarmed.

Austria used very little cavalry against the Italians; on the contrary the Italians had remarkably good cavalry and were strong believers in the ability of that arm in battle. Probably what saved Italy from being entirely removed from the war in the Caporetto disaster in 1917, was the fact that Austria had but little cavalry on that front. A contrast is presented in the remarkably decisive victory of the Italians in 1918 when a mass of Italian cavalry gave a good account of itself.

THE BALKAN FRONT

The attempt on the part of the Central Powers, especially Germany, to accomplish the formation that is known as the "Mittel-Europe-Asia" brought Austria, Bulgaria, and Turkey into the war on the part of the Central Powers.

As Austria's operations began early, they will be taken up first:

Austria's declaration of war against Montenegro, August 9, 1914, created the Balkan theatre of war which comprised Serbia and Montenegro and the contiguous territory of Austria-Hungary. Later this front included Greece, Bulgaria and the Dardanelles.

The Austrians immediately attacked the Serbs, but were badly defeated, losing 50,000 men. Stung by defeat the Austrians renewed their attack and after days of stalemate along the Drina River, met with some success. The Serbs, however, countered after a slight retirement and penetrated the Austrian center and rolled up both wings of the Austrian army, and captured 60,000 men and 120 guns. During these operations the one cavalry division of the Serbians did excellent work, but it was insufficient in number to reap the full benefits of the Serbian breakthrough.

In the Balkan theatre of operations in 1915, the British failed in their Gallipoli campaign. The Central Powers succeeded in having Bulgaria join them and with a powerful combined attack under Mackensen and Ferdinand practically destroyed the Serbian army and captured the small Montenegrin forces. The Allies still maintained a foothold at Salonika and in northern Greece.

In 1916 the operations in Roumania took place; the French General Sarrail conducted a general offensive. These operations will be taken up separately later.

In 1917 Greece joined the Allies and cleared the way for preparation for a major offensive against the Bulgarians.

In 1918 the Allies penetrated the German-Bulgarian line and passed the cavalry through the breach to complete the victory. The cavalry used in this operation was,

3 regiments with machine guns, 2 automatic machine gun sections, one of armored cars and one of auto-trucks; 37-mm. guns on infantry machine gun carriages, and one radio set was attached to the cavalry. No artillery could be secured for this detachment.

The Allied attack began, September 15, 1918. The break-through was successful. The Bulgarian armies were separated. Nish was reached October 12th and the Orient Railway was cut, severing Turkey from Germany. Bulgaria sued for peace and Turkey fell on its knees.

In this operation the cavalry, September 22d, went through the breach to exploit the success. The Eleventh German Army on the right (made up mainly of Bulgarians) was holding on tenaciously. Therefore, the cavalry was given the mission of capturing Uskub through which the Eleventh Army must retreat. When barred from the route of march selected, the cavalry, leaving its mechanical vehicles behind, did not hesitate to change its course and cross a most difficult mountain range. This most difficult march lasted from late September 25th to early September 29th when Uskub was attacked and captured. A 210-mm. cannon, a 105-mm. battery, complete, with its personnel, 100 vehicles of convoy, 1,000 head of cattle and 350 prisoners were taken that day by this cavalry force of men. What is more important the gate in the defile had been closed to the retreating Eleventh Army, the leading elements of which attacked Uskub on September 30th, after the armistice. The cavalry was relieved by a detachment of infantry at 11:00 A.M., October 1st, and sent on missions compelling the Bulgarians to comply with the terms of the armistice. The 90,000 men of the Eleventh Army were made prisoners of war.

Viewing the Balkan Front from a general point of view it can be said the Austrian operations against the Serbians were not successful until joined by the Bulgarians. Both the Serbians and the Austrians used cavalry in their operations. The Serbian cavalry undoubtedly proved the better of the two. It is unfortunate that Serbia had not more than one division to take advantage of the break-through made in 1914. In 1918 the world witnessed a decisive defeat of the German-Bulgarians on the Bulgarian Front in an operation where cavalry swung the pendulum to victory by a margin of twenty-four hours.

Next in connection with the objective—Mittel-Europe-Asia—the entry and fall of Roumania will be discussed:

The German cavalry played a brilliant rôle in the crushing of Roumania in 1916. This nation entered the war on the side of the Allies, August 27, 1916, and early in December the same year, the Roumanians were crushed and occupied but a small portion of their country.

Active operation began when three of the four Roumanian armies attacked the German-Austrian forces in Transylvania, forcing them to retire. Hindenburg countered by ordering Mackensen, in Bulgaria, to attack the Roumanian southern forces, which required a withdrawal of Roumanian troops from the Transylvania attack to the north.

Hindenburg was successful in retarding the attack and with an augmented army group planned to halt the Roumanians. Schemettow at the head of a mixed group of two cavalry divisions (3d German Division, 1st Austrian Division), one infantry division, a battery of 10-cm. guns and three batteries of mortar played a successful defensive part while pressure by German and Austrian infantry on other parts of the front prevented the Roumanians from exploiting their Transylvania success.

In September, 1916, the Archduke Charles of Austria, who relieved Hindenburg, began a counter offensive against the Roumanians. In this offensive the Schemettow group, which was constituted as stated above under Hindenburg, was on the left flank of the Ninth Army under Falkenhayn, and in liaison with the First Austrian Army to the north.

Before the German counter offensive planned for September 26th started, the Roumanians attacked, driving at the junction of the Ninth and First Armies. The Schemettow group received the main blow. The 3d Cavalry Division did not give up an inch of terrain in the face of strong attack, but the 1st Austrian Cavalry Division on its left was forced to withdraw. As the Roumanians did not renew the attack on the 24th, the offensive planned for the 26th was ordered.

In this offensive, which had as its object the defeat of the First Roumanian Army to the south, the 3d Cavalry Division attacking the enemy right completed the encircling of the Roumanian army. The 1st Austrian Cavalry Division facing to the east and covering the maneuver of the Ninth army was attacked by several Roumanian divisions of the Second Army and forced to yield some ground, but the situation was reestablished by reinforcements consisting of one infantry regiment and a group of howitzers and heavy artillery. The offensive resulted in definitely putting out of action the First Roumanian Army.

The Ninth Army, which had been attacking south, now had to face the east and attack the Second Roumanian Army. A cavalry corps (3d Cavalry Division and 1st Austrian Division) under Schemettow was to cover this change of front and while so doing it had to maintain liaison with the First Austrian Army to the north. The Roumanians attacked the First Austrian Army and forced it to retreat. Schemettow's left, the 1st Austrian Division, covered its retirement. On October 2d, the cavalry corps attacked in liaison with the south wing of the First Austrian Army and by the 3d of October the Second Roumanian Army was checked.

On October 5th the regrouping of the Ninth German Army, augmented by the southern corps of the First Austrian Army, was completed. Schemettow's cavalry corps was placed on its northern flank to oppose a large body of Roumanian cavalry reported in that region. In performing this mission the cavalry corps successively maintained liaison with the First Austrian Army and covered the left of the Ninth Army which captured Kron-

stadt and drove the Second Roumanian Army into the Transylvania Alps.

In order to make further advance the Germans must break through the defiles leading into Roumania. An attack on a broad front with the hope of breaking through at one or more places was decided upon. The cavalry corps on the north was the only unit that accomplished its mission and stood ready to debouch into the plains of Moldavia, but due to the non-success generally of the offensive it was not ordered to advance.

Soon the offensive was resumed by the Germans and Austrians. Two newly organized cavalry divisions took part in this operation. Again the operation failed. It was not until a third attempt was made that success attended the German efforts and placed a considerable force on the Roumanian side of the Transylvania Alps.

The cavalry corps, consisting of the new divisions, the 6th and 7th, under Schemmetow was to cover the right of the further movements of the Ninth Army. The advance of the cavalry corps was at first repulsed, but when the general attack was again renewed its mission was successfully carried out. The left of the Roumanians being rolled up, their retreat began and the cavalry corps took up the pursuit. The pursuit was slow, owing to the terrible condition of the roads and the necessity of uniting the armies of Falkenhayn in the north and Mackensen in the south. Nevertheless elements of the cavalry corps after many severe encounters received the surrender of Bucharest on the 6th and in cooperation with the two cavalry divisions of Mackensen's Army, it destroyed all communications between Bucharest and the east.

The German and Austrian victory in this campaign was remarkably decisive and again we see that cavalry was particularly employed and wonderfully successful in carrying out missions which were vital to the success of the operations.

On the Balkan front three decisive victories are recorded, First the Austrian defeat of the Serbs and Montenegrins, second the defeat of Roumania by the Central Powers and third the defeat of the German-Bulgarians in 1918. Cavalry had a most direct and decisive part in the last two victories, the last especially striking a vital blow to the cause of the Central Powers cutting the lines of communication between Germany and Turkey.

IN ASIA MINOR

Turkey's part in the war will be next taken up and it is as follows:

Turkey entered the War October 29, 1914, operating immediately against the British in Egypt and Persia, and also by attacking Odessa and the Russians' naval force in the Black Sea. The object of the Turkish operations was to secure the British naval oil base in the Persian Gulf, to gain possession of the Suez Canal, and to secure the Caucasus oil fields from the Russians.

After the Russians had been driven from Poland in 1915 the Czar took command and he dispatched Grand Duke Nicholas to the Caucasus where a successful offen-

sive was launched against the Turks in January, 1916, and by June 26th had captured all his objectives. The Turks under German officers countered with little success. Grand Duke Nicholas attempted but failed to cooperate with General Townsend in Mesopotamia.

Russian cavalry in combination with other arms took a creditable part in the successful operations in 1915 and 1916 on the Caucaso-Turkish front. In Persia the operations of the Independent Caucasus cavalry was important to the Allied cause. It protected the English banks and consulates, prevented all advances of German-Turks toward Afghanistan and India through Persia. The amount of cavalry on these fronts is not definitely known, but it is estimated as eleven divisions.

During the first three years of the war and while the Egyptian Expeditionary Force was advancing 150 miles east from the Suez Canal to southern Palestine, the British cavalry was constantly performing useful service in the rôle of security and information. During the building of the railroad and water pipe lines eastward, it was the daily duty of the cavalry to protect the working parties in advance of railhead. The British cavalry, in combination with other arms, engaged in combat at the Suez Canal defenses in 1915, at the battle of Romani in 1916, and in the two Gaza battles in 1917. The operations of capturing Magdhaba and Rafa, with practically their entire garrisons, at 25 and 30 miles distance from infantry support, were carried out by mounted troops alone. In May, 1917, the British right flank was rendered secure by the destruction of 13 miles of railroad track south of Beersheba, this operation being performed by the cavalry.

One of the important features of the plan for the attack of the Gaza-Beersheba Front and the subsequent advance northward was the employment of a mass of cavalry against the Turkish eastern flank and later in the pursuit. General Allenby had at that time seven infantry divisions and the equivalent of four cavalry divisions. The preliminary operation, the capture of Beersheba in one day, was finally accomplished by a mounted charge of the 4th Australian Light Horse Brigade. Later after the infantry break-through on the Turkish eastern flank made by four infantry divisions, the Desert Mounted Corps, supported by two infantry divisions, took up a rapid pursuit of the defeated Turkish armies. These operations prepared the way for the subsequent capture of Jerusalem, December 8, 1917.

In February, 1918, one infantry and one cavalry division captured Jericho and drove the Turks to the Jordan River. This was followed in March and April, 1918, by two raids across the Jordan River, one on Amman and one on Es Salt. These raids were made by two cavalry divisions, in combination with other arms. The result was to cause the Turks to increase their forces east of the Jordan River and to become apprehensive of the safety of their line of communications. This result was still further enhanced by the occupation, during the summer of 1918, of the Jordan Valley by the Desert Mounted Corps.

In September, 1918, General Allenby had at his dis-

posals seven infantry and four cavalry divisions. The central idea in his offensive plan was to make use of his great superiority in mounted troops by placing a mass of cavalry across the Turkish lines of communications and to destroy the Turkish armies instead of merely to complete a local success. Within 36 hours after the infantry broke through the Turkish defenses on the coastal plain, the British cavalry were from 45 to 60 miles in rear of the former Turkish front line, and were rapidly closing up all avenues of escape. Within four days the Seventh and Eighth Turkish Armies were practically destroyed. The destruction of the Fourth Turkish Army east of the Jordan River followed shortly afterward. The most relentless pursuit in history then began. Within 10 days Damascus was captured and within 36 days British occupied Aleppo (300 miles in an air-line from point of departure) and had cut the Bagdad Railway, the only line of communications between Constantinople and Mesopotamia. Out of an estimated total of 105,000 Turkish troops south of Damascus, about 90,000 passed through British cages as prisoners.

Mesopotamia was one of the important territories involved in the World War, although it was far from the main battle ground of the war. Britain needed naval control of the Persian Gulf of India, and Germany had cast longing eyes toward the trade of Asia as evidenced by German railway concessions in Mesopotamia, German diplomatic moves in Jerusalem, and the dreamed of "Mittel-Europe-Asia," one of the objectives of the war.

The British, in November and December, 1914, captured the port of Basra, and thus gained possession of the delta of the Tigris and Euphrates Rivers and drove the Turks toward Bagdad—their military base.

Once committed to a campaign the British as usual planned to carry it to a successful conclusion. This led to the capture of Kut El Amara late in September, 1915. A cavalry brigade, which had grown from a regiment in 1914, played an important part in the capture of this place. General Townsend advanced from Kut up the Tigris toward Bagdad, but was defeated near Bagdad and forced to retreat on Kut. In this retreat the cavalry brigade by an attack on the flank of the battling Turks allowed the British infantry to disengage and begin an orderly retreat. Townsend withdrew into Kut and was invested by the Turks. The cavalry brigade was not invested but was sent south, where it covered the formation of troops that made three futile attempts to relieve Kut.

After General Townsend surrendered, Sir Stanley Maude took command of the British forces and succeeded in capturing Kut and later Bagdad. A cavalry brigade fought in all the battles and took part in the pursuit after the capture of Bagdad. The capture of Ramadi on the Euphrates River, an important point on an approach to Bagdad, was made particularly effective by the capture of practically the entire Turkish garrison of 3,500 men. The cavalry brigade by an encircling movement placed itself across the only line of retreat of the Turks and made possible these captures.

The remarkable tactician, Sir Stanley Maude, died of cholera, November 19, 1917, in Bagdad; but was succeeded by Sir William Marshall, who fortunately believed in the tactics of General Maude. Sir William, in March, 1918, by a repetition of the plan of battle of Ramadi, captured Khan Baghdadi. This time the cavalry brigade by a 60 mile march over a waterless desert before midnight of the first day of operations cut off the Turks' retreat. The capture this time amounted to 5,200.

These operations secured Bagdad from the west, but not from the Mosul to the north; therefore, in May, 1918, a very mobile force constituted mainly of cavalry, by swift marches, sometimes 50 miles a day, captured Kifri and Dirbuk. Kifri, which not only protected Bagdad but controlled the avenues into Persia, was firmly secured by the British.

Mesopotamia was cleared of practically all Turks by the operations of Sir William Marshall during the latter part of October, 1918. In this campaign two cavalry brigades took a decisive part in battle. At the Lesser Sab River the cavalry forced a crossing in the face of the enemy and by outflanking Turkish positions assisted greatly in securing victories for the British. Farther to the north the cavalry again crossed the river and secured a position across the line of retreat of the main body of the enemy. In this position it found itself practically surrounded by the approach of Turkish reinforcements from Mosul. A skillful use of the rapidity of movement over fire swept areas gave the cavalry a victory over the reinforcing Turks. The main body of the Turks, pressed by an infantry division and cut off by two cavalry brigades, surrendered with 11,000 men, 51 guns, 130 machine guns, 3 paddle steamers and a complete bridging train.

The operations in Asia Minor can be summed up as follows:

The part Turkey was to play in the war for the Central Powers was to maintain the Constantinople-Bagdad line to Persia and to secure the oil fields of the Russians in the Caucasian Mountains, and also the oil fields from the British in Persia; in addition to this, the capture of the Suez Canal. It will be noted that the Central Powers failed to gain any of their objectives. In the victories which prevented the Central Powers' success, cavalry took part in all. The operations in the Sinai-Peninsula, that is, Palestine and Mesopotamia, decisive victories were gained—cavalry taking a most important part.

VARIOUS FRONTS

A picture of the World War would not be completed without saying that Japan, an ally of Great Britain, entered the war against Germany on August 15, 1914, and by combined land and naval operations, which had no cavalry, secured all German possessions in Asia. The Allies also operated in northern Russia without any marked success.

Africa was the scene of many conflicts. The operations in Africa were decisive and again cavalry took a most active part. By the end of 1914, France and England had

secured Togoland, one of the four German colonies in Africa. In 1917 the subjection of German East Africa was completed.

During the South African rebellion, 1914-1915, mounted troops were used by both sides. Mounted troops were used by the British in the campaign in the Cameroons, West Africa. In German Southwest Africa the Germans employed some cavalry, while the British made use of cavalry and other mounted troops to a large extent. Some of the British columns were composed of mounted troops altogether. Again cavalry and mounted units took a most active part in a decisive campaign.

CONCLUSIONS

We see cavalry in the picture of the World War, providing the following setting:

A break in a strong entrenched front made by the infantry and artillery, the cavalry passing rapidly through this break maintaining the initiative by rapid movement, taking advantage of the element of time that enters into all battles, encircling the retreating enemy, fighting when necessary to reach the sensitive points on the lines of retreat—and holding these sensitive points until the arrival of the other arm.

This picture is most vivid in the Italian drive in 1918, where 700,000 Austrians and 7,000 guns were captured—in the Palestine campaign in 1918 where victory shows the capture of 90,000 Turks out of the 105,000 that composed the Turkish Armies—in the Balkan drive in 1918 where 90,000 men were captured.

Further we see an advancing army covered by Cavalry gaining information and clearing up the situation for the infantry combat that follows: The most noticeable example of this is the German armies in the advance through France in 1914. Again we see a hard-pressed army retreating, the army protected by cavalry. We look again to the Western Front for an example and find the cavalry work during the retirement of the

allied army in 1914 before the Germans a remarkable achievement.

We find the cavalry taking part in the main battle, both mounted and dismounted. The most outstanding examples of this are the German cavalry in the Roumanian campaign, and the British cavalry in the Palestine and Mesopotamia campaigns. Many instances of cavalry taking part in battle on the Western Front are recorded. Attention can well be directed to the use of the French II Cavalry Corps in 1918 where it was rapidly thrown into action in Flanders for 16 days and then relieved, and before it could be thoroughly reorganized moved to the eastern flank of the battle line 125 miles distant and again immediately going into battle.

During the World War, from a standpoint of theatres of operations, we find the following results:

On the Russian Front the Russians were defeated decisively, but the defeat was due to the Bolshevik Revolution.

The Western Front—the operations on this front were not decisive. The German drive against Amiens in March, 1918, created probably the most serious condition in the Allied Command on the Western Front during the war. The cavalry factor in this drive is well stated in the following quotation of Ludendorff:

"The cavalry was of the greatest importance and service to me in all campaigns of movement. In the March, 1918, offensive I felt seriously handicapped by lack of cavalry."

Decisive results were obtained on six fronts. The Germans lost all their African colonies. The Japanese in Asia were completely successful. The Germans and Austrians defeated Roumania. Italy decisively defeated the Austrians. The British decisively defeated the Turks in Asia Minor and the Allies decisively defeated the Germans and Bulgarians on the Balkan Front. In five of these six campaigns cavalry took a direct decisive part and swung the pendulum toward victory.



The R.O.T.C. is the West Point of the Reserves and as time marches on it will have served the fine purpose of replacing the Reserve officers of World War experience, who have become too old to serve the Colors again, on the field of battle.—*Bulletin, Headquarters Sixth Corps Area.*



Crazy Business

By PETER B. KYNE



PART VI

Shortly before I was ordered to the school of fire at Fort Sill we underwent an experience that must have been as disturbing to my brother officers as it was to me, yet, strangely enough, I do not recall that anybody ever referred to it. We shot at the target range for nearly three weeks with defective ammunition. Every third or fourth shot was a short burst—and we had, perhaps, a dozen muzzle bursts. Each time I stood behind the guns directing fire I'd think: *Now, this time, that projectile is going to burst in the tube, and my gun crew and I will be smeared. Why doesn't the brigade commander or the commandant of the school fire have the guns set in concrete emplacements, with a concrete wall behind the gun to protect the crew and the officer conducting fire? Why, even plain dirt emplacements would do. And the gunner could fire the piece by pulling a long lanyard. Why do they risk our lives so needlessly?*

I had one gunner corporal who appeared to be the only enlisted man alive to the situation. As soon as the gun was ready to fire and his hand crept over on the trigger, he'd turn his head and give me a woeful stare, followed by a faint shake of his head and a look that said: "Now I lay me down to sleep, I pray the Lord my soul to keep." Occasionally he would vary his pantomime with a slow fateful wink.

This same lack of consideration, when using defective ammunition (I imagine it was old stuff that had been accumulating for years in arsenals) was also in evidence at Fort Sill. A projectile had exploded in the tube of a gun there, killing and maiming three of the crew and killing the officer who was conducting the fire. Thereafter they built a wall of sandbags between the guns and the officer conducting fire, but the enlisted men still had to take the fall of the play. I asked an assistant gunnery instructor one day why the men weren't protected and he said it was the desire of the school to *simulate service conditions*. This high in Jackassery continued until, I was informed later, an inspector from the office, Chief of Field Artillery ordered concrete emplacements and the guns fired with lanyards.

This madness to simulate service conditions extended to the teaching of gunnery. I remember the days I conducted fire (very briefly, for they always blew the whistle on me before I completed a problem); I had to stand around for hours in heat well over one hundred degrees until my brains were baked and my eyes watery from use of an eight-powered glass spotting other fellows' bursts in heat waves. One's canteen would soon be empty and thirst would as-

sail one. I asked an instructor why plenty of cool water was not provided, as well as an overhead shelter for shade and why must an officer not shooting be compelled to spot the bursts of one who was shooting until, when his turn to shoot came, he was physically incapable of a decent effort. The answer was that it was desired, during the training, *to simulate service conditions*. I suggested that if the wretched student were made comfortable during his training it was conceivable he might learn much faster and remember what he had learned and that, once he knew how to shoot, he could and would shoot with ease under any sort of service condition! The look I drew for this revolutionary criticism indicated that I was regarded as a sort of military Red. But I still think I'm right, and eventually somebody in authority thought so, too.

Having passed safely through the Camp Kearny barrage of defective ammunition I dropped in on the colonel to inquire respectfully how come we had been operating a post exchange for six months and no dividends. This precipitated an investigation and uncovered a unique game that was being played by the enlisted men who worked in the post exchange. When four bits came over the counter it was tossed to the ceiling. If it stayed there a minute it was placed in the cash register but if it obeyed instantly Newton's law of gravity it was placed in the pocket of a pair of khaki trousers. The excellent chap I had originally appointed canteen officer was so well equipped with this world's goods that he had no conception of the strain on others in the presence of cash; he thought all men were as honest as himself. I thought a scandal and a court-martial would develop out of this, and break our colonel's heart, but for some reason nobody ever heard about it. The crew was changed, the post-exchange officer went to staff duty far away and a new man took over with such vigor that we had one dividend before we closed up shop to go to France.

Our regimental supply officer, some months previous, had suddenly awakened to the fact that he was many thousand dollars short in his property accounts. It was bad bookkeeping, so a second lieutenant was made a captain and assigned to command the supply company, while the former supply captain, for his good work, was elevated to a majority. For some reason no check on our supply was ever made by higher authority and when we got to France where property accountability ceased the new supply officer commenced to breathe again. He straightened out the books and developed into a perfect cracker-jack of a supply officer. There never was the slightest danger, however, of *him* being kicked upstairs.



"... to inquire respectfully how come we had been operating a post exchange for six months and no dividends."

In our regiment there was always much profound discussion of the subject of discipline. Ideas varied considerably on the subject. One captain never did anything about it until he got angry; another always handed out punishment that exceeded the crime, another held grudges against a man once the man had offended, another, after being promoted to major, still jealously held on to the discipline of the enlisted men in the two batteries he commanded, trying the men and punishing them, thus making of the battery commanders mere nonentities, earning for them the disrespect and contempt of their men and for himself a brand of concentrated hatred I have never seen equaled. I doubt if any battery commander, with the exception of old Krantz and myself, ever tried leading in preference to driving, in out gaming an enlisted man psychologically, in smiling when they tried him, in refusing to hold grudges. No man of ours ever received a summary court unless he asked for it.

I was presumed, by my colonel and brother officers, to be very soft with my men and much too democratic with lieutenants. I recall that one day we were issuing gas

masks and one of my recently acquired recruits, who had some notion about being a conscientious objector, suddenly decided he must have some sort of issue if he was to make his conscientious objection stand up. So he refused to wear a gas mask. I considered the rebel; I knew he had a quirk in his brain and that I would achieve nothing if I tangled with that quirk. A superior officer was present and I saw by his quick glance that he was waiting for me to do what he would have done, i.e., hustle the nut off to the guard-tent. He was scandalized when I said kindly: "Very well, son, you do not have to wear a gas mask if it conflicts with your religious scruples. However, I would advise that you wear it. In fact, all the best authorities advise wearing a gas mask when you take your gas training in the gas chamber! Sergeant, this man has a large face. I think a Number Four will do him nicely. No wonder he refused to wear a gas mask. You've been trying to sell him a Number Three that pinched him and stopped his circulation."

If you feed a boob a reasonable excuse to reverse himself with a figment of dignity he will grab the excuse. This fellow did, and the incident passed without further discussion. Eventually this man conceived a sort of sneaking liking for me. I'd meet him in the battery street and say: "Well, boy, how's that conscientious soul of yours this morning? Is it getting to like the army any better?" And without waiting for an answer I'd ask him confidentially if he was getting a square deal and if not, to see me about it. Finally he decided it was much easier to be a soldier than an outstanding nut.

Every man has his weak spot, but of course, one has to know every man quite intimately in order to discover this weak spot. Of course the war-time enlisted man, being in many cases, better equipped mentally than his officers, will speedily discover the weak spots in his officers. It is of no use to try to hide one's weak spots if they are the right sort. For instance old Krantz had one very big weak spot. He loved his men, they soon discovered this and loved him for loving them! They would not have hurt him or annoyed him for a farm. He was known as Father Krantz.

My weak spot was a sense of humor, but I had a strong spot and I was well aware of it. I was a better than average lay psychologist and psychiatrist; the human mind was not a closed book to me. For instance one of my very young soldiers got down with nostalgia and commenced fading away on me. I knew a furlough home would cure him, so when he came crying to me for one I didn't dare send him home with his rosy cheeks and twelve pounds missing. I had to build him up and to do that I had to restore his appetite. So I promised him a furlough in three weeks and in the meantime, if he ate in the post exchange anywhere outside our excellent mess, he'd never get a furlough. That night he ate a longshoreman's ration, in three weeks I sent him home with rosy cheeks and he returned, cured and happy. So then I talked to him and told him all about himself. Naturally he wouldn't believe me, and in about two weeks he com-

menced fading away on me again. In a month he came bellowing for another furlough and was refused. A few nights later, in order to melt my hard heart, this neurotic boy actually hypnotized himself into paralysis of both legs and woke screaming. Naturally I knew he couldn't be paralyzed in both legs because of an injury, so when I was summoned I brought a needle with me and jabbed it an inch into his buttocks. He had so thoroughly anaesthetized himself, however, that he didn't feel it. The first sergeant and some sorrowing privates stood around and I said: "I'll show you men how I cure this sort of thing," and suddenly I jerked the kid up off the stretcher and held him dangling long enough to give him a kick in the posterior that must have jarred his back teeth. He lit running with his quondam sympathizers pursuing him, in great rage, because the bogus boy had traded on their warm kind natures for a lot of genuine sympathy.

I did not take this boy to France and I imagine he has been malingering on the country ever since, receiving treatment and compensation when all he ever needed to cure him was a swift kick in that portion of the anatomy which no gentleman will ever present to friend or foe.

Snooper had a weak spot, too. His weakness was recalcitrant soldiers. He loved to make them over and he always succeeded. We used to think up little playlets and perform them together for the benefit of the culprits on my morning calendar. Snooper could spot a mental quirk almost instantaneously. I was much slower. He was more charitable than I and would recommend one more chance after I knew it was love's labor lost and that a hearty swat was in order. And here I was generally right. However, between the two of us, we had order and discipline and happiness, and we were NOT soft.

However, I had the reputation, not only of having no discipline in my battery but of being undisciplined myself. This was quite apparent one day in Camp Kearny when the colonel called me in about five o'clock and somewhat excitedly informed me that he had just had a tip from division headquarters that one General Helmick was in camp to make an inspection for the Chief of Field Artillery. It had been reported to my colonel that General Helmick would raise hell if matériel, stables and horses weren't in first-class order. "So you go right down to your stables," the colonel ordered, "and get your battery readied up tonight for inspection. It may come at any moment. This General Helmick never gives warning."

"Bully for General Helmick," I replied. "I wouldn't mind soldiering under him. By the way, sir, who told you my outfit requires readying-up for the Helmick inspection?"

"I do not have to be told," he replied sharply. "I know it. Everybody knows it."

"Ah!" I replied. "So you listen to everybody. You do not know of your own knowledge because you haven't inspected me in six months."

"Clear out," he commanded, "and get on the job."

"It's too late to get ready for an inspection now," I protested. "Besides, I've been ready for this General Helmick

for so long I'm beginning to feel badly because my colonel doesn't know it or appreciate it."

"You heard my order?"

"Seems rather futile, sir," I protested again, "because General Helmick popped in on my stable sergeant half an hour ago and went over stables, horses, harness, wagons et cetera like a foxhound on a warm scent. He was delighted with what he found and complimented my stable sergeant highly."

I enjoyed delivering this rabbit punch. However, it must not be understood that we got along together like two strange bulldogs. True, we nipped each other whenever we could, but had either gotten a good mouthful he would not have hung on and drawn blood, because we had to smile at each other at mess. The colonel never sat down to meat with a misery in his heart against any man. I used to feel a little sorry for him sitting at the head of the table beaming on his captains and majors and I the only one who had never been to the brigade commander with knocks against my colonel. There was a very active cabal on against him; gentlemen who had never had any more military experience than a jackrabbit, and who were endowed with less qualities of leadership, felt that he should be skidded to some other branch of the service where his abilities and temperament would enable him to serve with greater distinction. The cabal was political in its genesis—the old lust for power. And the colonel knew all about their activities and never let on.

I had had a similar experience in my own battery. I suppose I had been in command a month when my lieutenants concluded I was a washout as a battery commander. So they decided to get a Round Robin signed by themselves and the enlisted men of the battery, petitioning the colonel to skid me somewhere. Unfortunately, knowing absolutely nothing about men, they unfolded the cute scheme to gallant, loyal old Snooper, who practically tore them apart. But he never mentioned the matter to me. I had it from another quarter. So I, too, had to smile at the lads and continue to carry on. They didn't know any better and I found their arrogance and conceit vastly amusing. In the long run I reduced the swelling. One night in France the leader of this cabal against me worked over a second lieutenant in a truly horrible manner and then had the bad taste to ask if any officer present thought he'd like some of the same.

Old Snooper's hour had struck. "I'll have a helping," he said. "Step outside." It was a famous victory, quoth Little Peterkin, and I was not officially aware of it. Snooper paid off seventeen months of bullying to him and disloyalty to me, so, for the first time since I'd joined the outfit I felt that there was a modicum of oil in my cruse, just a dash of Balm in Gilead.

It was agreed by one and all of my equals and seniors that I was a pretty hopeless battery commander. One day at mess one of them remarked that, with all my faults, he believed I possessed guts. I embarrassed him horribly by entering at the moment and informing him smilingly that he was wrong—again, that I had no guts; that, al-

though I had trailed along through a few stormy passages I had always been dreadfully frightened. However, out of my travail, I had discovered that one should never form opinions touching men's courage or the lack of it, because courage is a variable thing and not to be discussed by gentlemen who never had had their courage remotely tested.

Curiously enough it was assumed that I had no discipline because I never preferred charges against my culprits, except once, in the case of a thief and again in the case of ten men who went A.W.O.L. on me at Christmas. I had hired a special train and sent a hundred and seventy-five of them home to San Francisco for what might be their last Christmas dinner with the old folks; I purchased the round-trip tickets, took what cash they had in partial payment and trusted them for the remainder, tapped a steam pipe in the baggage car, put in a steam table, rations and the mess sergeant in command. So these ten got three months in the stockade, not for being A.W.O. but for ingratitude and disloyalty.

I always felt that to call the summary court officer in to discipline any of my men was a reflection on my ability—or good old Snooper's. Both Snooper and I possessed imagination. We could think up punishments that hurt far worse than a week or two in the colonel's big guard tent, where all a culprit had to do was sit around, smoke, play cards and tell snappy stories; then, at night, creep out under the tent wall, enjoy himself at the K. of C. Hall or Y.M.C.A. Hall or The Community Center and crawl back in for check roll call—if any.

I have often reflected that, more terrifying than metal coming one's way is the officer whose new-found authority hangs on him like an ill-fitting garment; the man with the inferiority complex, in his mad effort to hide which he assumes a pose of superiority, which, nine times out of ten makes a bully of him and robs him of sympathy where sympathy or a sense of humor is indicated. Such men fight their jobs and haze men around for trifles; they love rules for the satisfaction of enforcing them, no matter how silly. They never learn that a wise officer will not see *TOO* much.

After it became generally known that a wife could have half of her husband's pay allotted to her and that there was ten thousand dollars worth of life insurance in the event of the man's death in action, I found myself very frequently sitting as judge in a domestic relations court. Usually the lady would show up at my orderly tent in tow of an orderly from division headquarters and demand instant audience with her recreant spouse. I would get out his service record and if at enlistment he had posed as a single man (and most of them did) I knew I had to proceed cautiously or have my lad in a tangle over fraudulent enlistment. So the soldier would always be far out on the target range and not due in for hours, and would the lady mind sitting on this comfortable cot and waiting? She would not. She had traveled far to get her man and she did not intend to have a few hours wait baffle her.

I would then talk to her about her married life. Mean,

bone-headed, ill-bred women always tell all they know; they have no restraint, and pretty soon I'd realize that if my soldier hadn't fled with the speed of two antelopes from the Zantippe he'd married he should be shot at sunrise. Snooper, of course, would go down the battery street and tell the soldier to hide in the barn until I sent for him. At noon I'd suggest to the lady that she go over to the Community Center restaurant for her luncheon and I'd send her over in my car and bring her back. That always went over big. I'd sympathize with her and *she knew* I was her friend. The moment she was gone I'd have the soldier in and listen to his tale. Usually he was loth to discuss the domestic tragedy, but little by little he'd alibi himself; perhaps I already knew he was a pretty solid citizen. And if he had not been married more than ten years; if his wife was still young and if she had been self-supporting since the bust-up—why, she just naturally never caught up with her husband. When she returned I'd say: "Well, your husband is in from the target range. Orderly, tell Private Throatlatch to report here."

Of course Private Throatlatch, who was a redhead, would not report, but his bunkie, a decided brunette, would step in, snap into it and say in ringing tones: "Sir, Private Throatlatch reports to the captain." There would be a squeal. "Why, that's not my husband!" And I'd say: "You have the wrong husband or I have the wrong Private Throatlatch. You'll have to look elsewhere for your husband, madam."

Always the gentleman, I'd send her over to the railroad station in my car. I was so doggone nice she knew I couldn't be a crook. Well, was I going to let her grab all of Throatlatch's paydays for a year until she had caught up with the back payments, thus leaving Throatlatch a pauper dependent for his cigarette money and other creature comforts on me! One sergeant, whom I would gladly have saved from a vixen, walked into her and as a result he still owes me seventy-five dollars!

Of course if the soldier was a skunk I handed him over to his wife and then delivered him up to the Red Gods in the next casualty replacement draft. I do not think I ever erred. I have a nose for gold-diggers.

Early in the game I realized designing females would be marrying some of my bone-heads on the off chance that there might, within the year, be ten thousand dollars in it for them, so I made a speech to the men one night at retreat and informed them that it was a high military crime for a soldier to marry without first securing the consent of his battery commander. Those too sensible to get married did not bother to look up the Regulations on this point, and those who could be depended upon to do anything foolish believed me.

One day my most psychopathic soldier appeared at my tent conveying a female, the equal of whom could not have been found in heaven, on earth or down under the sea. She weighed about a hundred and seventy pounds ringside and was about five feet four inches tall. She had red hair and green eyes and a mouth like a snapping turtle's. She trundled a motorcycle and she wore soldier's

trousers, puttees, an OD. shirt and a black tie, and a dirty white tennis eyeshade in lieu of a hat.

The nut of a soldier snapped into it and said: "Sir, this is Lil and we're engaged to be married. I'd like the battery commander's permission."

I said gravely: "Son, did you secure the first sergeant's permission to interview me?"

"No, sir. You see, sir, this was so personal—"

"Report to the orderly tent in arrest for disobedience of orders," I commanded coldly. When he was gone I said: "Lil, you're in arrest."

"The hell I am," Lil retorted. "F'r Cris' sake, why?"

"For wearing the United States army uniform," I told her. I picked up my copy of Regulations, pretended to search for the law and pretended to read:

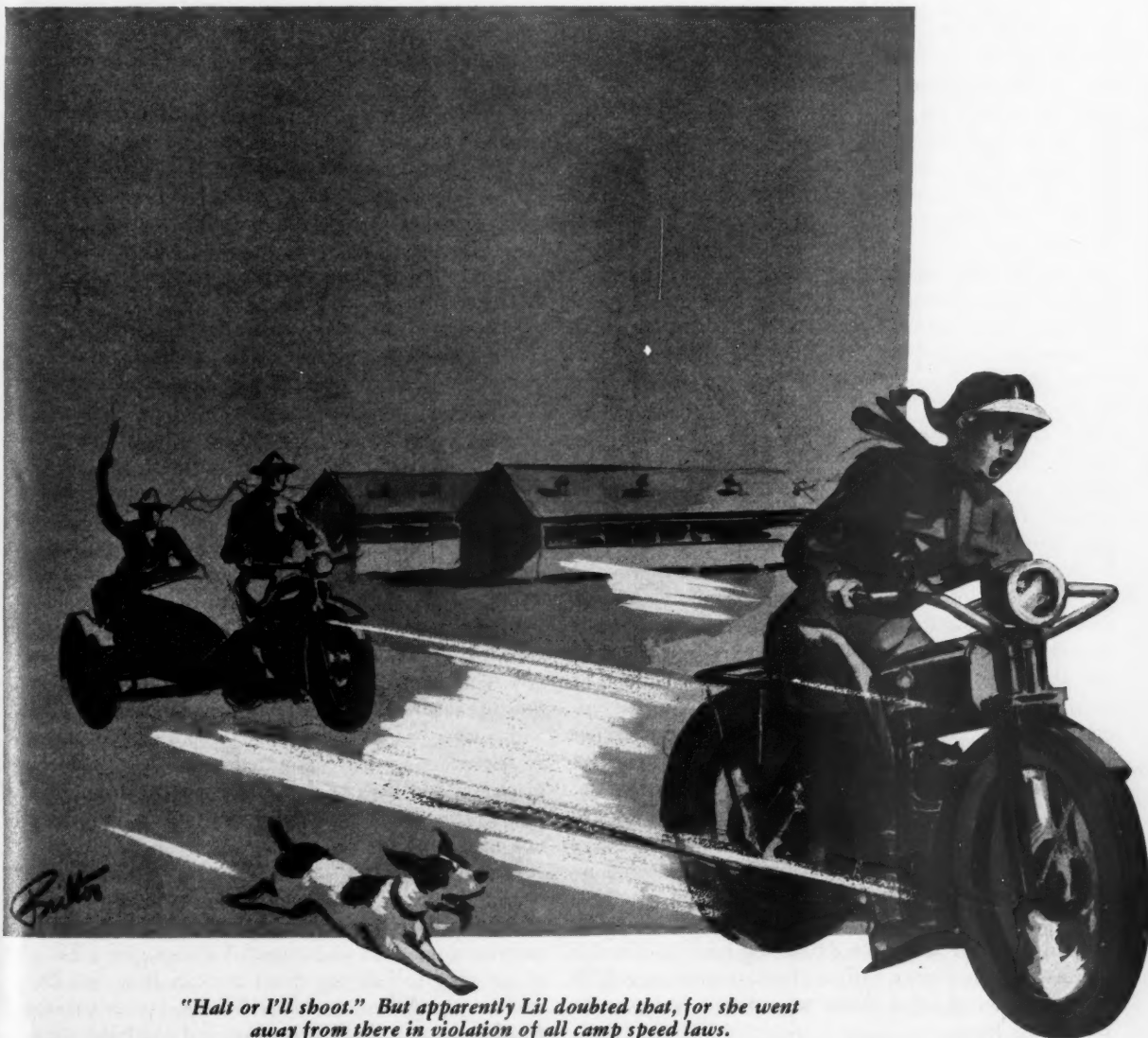
Article four, sub-section twenty-four, paragraph A, of an act entitled An Act To Preserve The Uniform Of The Armed Forces Of The United States Of America and the Employees

of the Treasury Department of the United States from disgrace.

Be it enacted that any person, whether male or female, who, not being a member of the armed forces of the United States of America or an employee of the Treasury Department of the United States, wilfully, maliciously, purposely and with malice prepense wears, exhibits, parades in or possesses the uniform of such armed forces or Treasury Department Employees in public or in private, whether in ignorance of this law or in defiance of it, shall be subject to arrest by any army, navy or Coast Guard officer or officer of the Treasury Department or regularly elected peace officer and upon conviction shall be sentenced to not less than five years in a Federal penitentiary and to pay a fine of not less than five thousand dollars or both.

I put down the book. "Lil," I said, "I hate to do this to a lady but my duty is clear. Leave your motor bike here—the military police will take care of it—and follow me down to the division stockade."

"Like hell I will," croaked the brave Lil, and sprang on



"Halt or I'll shoot." But apparently Lil doubted that, for she went away from there in violation of all camp speed laws.

her motor bike and started to crank it. I grabbed my gun. "Halt or I'll shoot," I yelled, but apparently Lil doubted that, for she went away from there with a vast sputtering and in violation of all the speed laws in camp. An M.P. private on a motorcycle with a sergeant sitting in the side car, came along at that moment, saw Lil and gave chase. Lil looked back and saw Nemesis closing in on her, so she went all out as the saying is. Nothing short of greased lightning could have overhauled her and she never came back. I handed the soldier thirty days confinement to camp and by the time his sentence was up the slight modicum of reason he possessed had returned to him.

I assure you, *mes enfants*, it is a distinct asset, not only to its possessor but to his enlisted men if one be a captain-author with a quick imagination and a facility at plot.

Another fool brought over one Sunday afternoon a languorous little huzzy, with honey-colored hair and brown eyes that just wouldn't behave when she looked at me. I saw at once she was one of the girls trying to be cute and respectable. The soldier said he desired my permission to marry the lady and I smiled like a person about to receive five bucks for tying the knot. I congratulated him on having selected such a lovely young lady for his bride and assured the young lady she was making no mistake in marrying my soldier. I begged her to step into my tent and sit down while we discussed the delightful details and I said to the soldier: "Lad, do me the favor to go down to the parking area and tell Marchand to come up with my car."

Now, this idiot had been bucked off a horse a few days before and had lit on his back and bruised himself considerably. So he still walked as if he had lumbago. As he departed I said to the girl: "My dear young lady, do you notice how your fiance walks—as if he had a pain in the small of his back?"

She said she did notice it, and I said: "Do you know why?" She said she did not and I said: "I knew, of course, you would not, since the soldier does not know himself. I made an excuse to send him away so I could have a confidential talk with you, because I do not wish to be a dog and stand idly by while a lovely girl like you marries a soldier she can never be happy with. Not that Private Rangefinder isn't a most excellent man, but because your marriage can only be of very brief duration and thereafter years of unhappiness for you will be in order. That soldier is suffering from a very rare but very deadly disease. He doesn't know it and you must not tell him; it is kinder to leave him in ignorance of his real condition. He has disintegration of the medulla oblongata. That is, the portion of his spinal cord where it divides to send the big nerves down each leg, is slowly rotting away; one day, very soon, he will be unable to walk; the following week or two he will become totally and incurably paralyzed; gradually the disease will run up his spinal cord to his brain and make a babbling idiot of him. He will never go to France with us, for this week he will be discharged for physical disability and sent home to die long years hence."

"Thanks," she said. "You're swell to tip me off." And she left and started hiking up the road; she was gone when the soldier returned and then did I give him hell undiluted! I told him I'd had the M.P.'s run her out of camp and couldn't he see under a bridge? If I ever caught her in camp again—if I ever saw him disgracing the service by squiring her around—he'd go to an infantry draft replacement so fast he'd be dead before he got his bearings.

I loved these little lies and dramas because they brightened up my dull life and saved the soldiers a lot of grief. For my soldiers were my children, and I was papa, and I conceived it to be my duty to save them. Of course an officer and a gentleman should never lie, but was this lying or was it just swift reversion to type, to my acquired instinct for fictioneering?

While engaged in digging gun pits in cement gravel I had been issued some dynamite, fuse and caps, and these had been stolen. This theft bothered me, because dynamite wasn't used by other captains, who built their gun pits in picking ground. I couldn't get the idea out of my head that one of my own men had stolen it for a mad purpose, and I told my instrument sergeant of my suspicions. He was my intelligence man in the outfit; he was older than myself and worldly wise and while he did not relish being a snitch still a little experience proved to him that if I knew in advance that certain men planned to go A.W.O.L., and get drunk, the fools could be saved by the simple operation of confining them to quarters or taking away their pass cards until the mood passed. I told this sergeant to search high and low for the lost dynamite, but it was never turned in to me.

Fifteen years later he confessed he was the thief and that he had stolen it for the purpose of blowing my executive officer into Kingdom Come some week-end when that officer was in camp in command of the outfit and all the rest of us were away enjoying ourselves. The trouble was that when the chance finally arrived he found me sticking around writing my novel, so of course, while he wanted to kill the man he hated he couldn't kill me, who lived next door, because he loved me. This man's hate was justified; he was being bullied but in such a manner I would not hear of it and the victim, of course, would not complain. So his hate rode him like a witch rides a broomstick; he was, in fact, a little bit unstable mentally and I give the colonel credit for discovering this eventually and insisting that the man he sent away to a replacement draft. So he never had an opportunity to do his job of murder. A few years ago he committed suicide. I imagine my suspicions and the fact that I had spoken to him, jarred him a little. He had the dynamite, fuse and caps hidden in a cigar box under his tent floor.

It was a cold day, indeed, when my soldiers did not hand me a hearty laugh, and, of course, in return for this it was my duty to hand them one. After I received my ration-savings check each month I always gave a banquet in our mess hall, hiring cheap crockery from San Diego and decorating the mess hall with colored paper streamers. I had had a stage built at one end and had hired a piano.

and at this banquet we always put on a pretty swell vaudeville show, and, of course, I always invited my foster-soldiers, the regimental band. One night the master of ceremonies announced that the next creature on the program would be Corporal Jones, who would recite "the Shooting Of Dan McGrew." Jones was pretty terrible; he recited it with gestures. But still he was doing his best so we gave him a hand, which was bad because it encouraged him to think it was good. So the following month he gave us Dan McGrew again—and the following day I pinned this order up on the battery bulletin board:

Hereafter Corporal Jones will no longer, at battery shows, recite "the Shooting Of Dan McGrew." He may, if he is up to it and will agree not to make arm signals, recite "the Face On The Barroom Floor," but not more than once.

This order was received with screams of laughter.

The commanding general met me one day and said: "Captain Kyne, I hear you have a wonderful banquet and a wonderful vaudeville show in your mess hall every month. Why do you not invite your poor, lonely old division commander? I like to laugh, too, and I enjoy good food."

So we had him over. Now, I had a chief cook, a huge Harp named McCluskey. Mac had a fine baritone voice, was a good actor and a natural song plugger. In the language of vaudeville, he could put a song over. He was funny without knowing it and had, to a marvelous degree, a truly Celtic facility for extemporaneous verse. He could pull a parody on his audience as swiftly as a Mexican pulls a knife.

The night the general was our guest Mac came on, in the white apron, cap and trousers of a cook. There were splotches of gravy on his clothing, and his honest mug was sweaty; he carried a cleaver with a two-foot handle and shreds of meat still clinging to the blade; he came on, leaned on his cleaver and sang, magnificently:

It's the wild, wild, wild, wild women,

They're making a bum out of me.

Called back for an encore, he pulled a parody, raised his cleaver, pointed it at our commanding general, and baring his magnificent teeth and putting on the look of a demon, sobbed:

It's the wild, wild, wild commanding general,

He's making a bum out of me.

This was entirely Mac's own cute idea, and the general never had such a grand laugh in all his life.

Fate sent me a recruit who admitted to being a baker,



"The Shooting of Dan McGrew" with gestures.

so I put him in the kitchen, which drove him crazy. One day, however, for no sound reason, he hauled off and made us a mess of the grandest doughnuts ever fed to mortal man—and I hold that I'm a judge of doughnuts. I told him so—and he went Communist on me, demanded Thursday afternoons off like any kitchen mechanic. I told him he could have Thursdays off but he must make doughnuts on Wednesday. I then ordered the mess sergeant to watch him mix the dough and get the great recipe, because I was loth to ire the soldier by letting him know who was boss around there until I had the doughnut recipe. Finally the sergeant said he thought he had it and on a Thursday when the coast was clear he

made up a sample lot. They were good but not perfect and the sergeant said he thought he knew wherein his error lay. So he made up another lot—and lo, they were the King's Doughnuts. The following Thursday I had him cook a thousand to make certain he could manufacture them on a commercial basis, and he could. So on Friday I banished my Communist to the Cooks and Bakers School and saw him no more.

Upon his return to civil life the mess sergeant opened up a little combination coffee-and-doughnut shop and ice cream parlor, and hung out a large electric sign advertising Aunt Mary's Doughnuts. The fame of his dough-

nuts spread. He has been in business twenty years and is financially independent. I chided him for calling his doughnut Aunt Mary's Doughnut and declared it should have been advertised as the Peter B. Kyne doughnut, so he could take advantage of all my publicity, but he declined to do that. However, he will not charge me for the coffee and doughnuts I consume on his premises and once in a while I pull up in front of his emporium and get a large bagful, free gratis. He always realized how keenly I suffered taking orders from that wretched private while the Great Secret was being learned.

(To be continued)



Father of American Cavalry



Under joint resolution of Congress (H.J. Res. 622) the President on July 1, 1938, by proclamation, set October 11th as "General Pulaski's Memorial Day" for the observation and commemoration of the death of that distinguished soldier.

Since 1932 the 308th Cavalry, Pittsburg, Pennsylvania, has conducted an annual meeting for the observance and commemoration of the death of General Pulaski. It is possible that other cavalry regiments of the army may adopt similar measures in paying honor and tribute to the memory of this great cavalry leader.

THE ROLE OF AVIATION

With Mechanized Cavalry

By CAPTAIN DAVID M. SCHLATTER, AIR CORPS

The traditional rôle of cavalry has been that of the man who fights mounted. Whether such fighting men are mounted on the light Tartar ponies of Genghis Khan, the camels of the Arab, or the combat car, the fighting mobility thus obtained makes them in actuality cavalry. It is in this rôle, as contrasted to that of mounted infantry that cavalry as an arm gained and maintained its ancient prominence on the battlefield. Until the battle of Rocroy in 1643, cavalry was the arm of the offensive, the deciding factor in battle. After Rocroy, we see the introduction of firearms gradually increasing the power of the defensive, the power of infantry, and effecting the power of the cavalry.

However, during the World War two new weapons appeared which foreshadowed the end of an epoch in warfare, and now the airplane and the tank promise to restore mobility and maneuver to the battlefield. Although development of the tank was slow, and proper employment conspicuous by its absence, many could recognize the decisive change which would come as a result of this weapon. The armies at that time were totally unable to take advantage of the tank because they lacked mobile fire power, and had not foreseen a penetration of sufficient size to be exploited in the grand manner. They were little better prepared to exploit the airplane. Proper employment had just been realized at the close of the war, and our present conception of the proper use of air power was being introduced by the British. They formed an Independent Bombardment Group for long range bombardment of hostile sensitive points, while pursuit was used in general area defense. Observation was found in its usual rôle of co-operation with the ground and air forces.

Coöperation between air and tanks was tried during the latter part of the World War and the following points are of interest:

Trials were made of airplanes communicating directly with individual tanks, and guiding them by radio. This idea was not very successful, and was not used in battle.

Many oblique and vertical photographs were furnished of ground over which operations were contemplated. This was simple because a tank could go only about 15 miles before requiring service and after several such trips it went to the junk heap. During and after August, 1918 this co-operation proved extremely valuable, especially in guiding vehicles in the assault.

Low-flying airplanes were used quite often during the last hour of the tank approach to drown out their noise, and this proved a very useful practice in gaining surprise. We use a similar device in the Air Corps to throw off

AA sound locators by low-flying attack or pursuit, as bombardment approaches the bomb release line.

As the anti-tank gun made its appearance, the "defense against" it was sought. A method used in 1918 was the co-operation of fighter (pursuit) airplanes to knock out guns or drive away crews by direct assault. From 21 August on, the British Tank Corps was allotted one fighter squadron in addition to its coöperative (observation) squadron, both being under command of the coöperative squadron commander. With photos or maps of the limited assault area marked with likely anti-tank gun positions, the fighter pilots were very successful in knocking out the anti-tank guns.

Coöperation between mechanized and air forces since the World War has not received the attention it deserves either here or abroad. Some lessons may be learned from the experiences of the British armored forces, organized in 1927.

Communication with individual vehicles was tried again and found wanting, as was any attempt to guide vehicles by radio. The best guide for individual vehicles was found to be oblique photographs of the terrain to be operated over and improved design of the vehicles themselves. For communication, the Commanding General is the one to be given all information, as he is the one directing all employment. Individual cars or unit commanders should intercept all such information possible.

Photographs proved of great value in the 1928 British armored force maneuvers, but due to the rapidly moving warfare as contrasted to the conditions of 1918, the problem of furnishing the right picture at the right time was, and still is, one not easily solved.

Airplanes were used to screen the noise of advance and this practice was favorably commented upon by all umpires.

Fighters to attack anti-tank guns were used, but the difficulties of coördination were very great. However, it was believed that by giving the fighters an area to watch, with positions marked where anti-tank guns were likely to be encountered, that direct assault to knock out the guns or drive away the crews could be made as they disclosed their position by opening fire. Concealed anti-tank guns are certainly the weapons to be feared most, even as the concealed machine guns were the ones that held up advances in the last war. If armor forces anti-tank guns to higher calibers, concealment becomes more difficult, and an important battle mission for air will be to aid in locating these obstacles, and aiding in their destruction. When well camouflaged and not in action, air detection will be next to impossible; as soon as firing is opened, detection

should not be difficult. The British believe that a better solution would be for mechanized forces to develop ground means of overcoming these guns, as fighter squadrons for attachment might not be available.

The tenfold increase in speed and range of tanks in ten years gave great difficulty to all concerned and especially so in the matter of reconnaissance. Where a depth of penetration for Division Aviation of 5 or 6 miles is still taught in map problems for battle reconnaissance, an almost continuous reconnaissance to a depth of 50 or 60 miles was found necessary. By the way, the 1937 yard stick a la Ft. Knox is nearer 150 miles. While maximum penetration of observation aviation assigned to field armies is 100 miles, continuous reconnaissance to the front and flanks of a force moving as rapidly as the mechanized force moves, and to a 50% greater depth offers a difficult problem. Much help may be expected from the Army observation group, especially in taking over reconnaissance to the flanks and rear as the mechanized force advances on an independent mission. Proper coordination will require a great deal of staff study on maneuvers and Command Post Exercises. It is questionable whether more than periodic surveillance of key points is necessary to such a depth, but reconnaissance of a nature far greater in magnitude than is the normal duty of a C & A squadron is plainly necessary.

Dependent on the air situation, formations may be found necessary for security against hostile pursuit, tripling the number of airplanes needed for a given job. Reconnaissance alone to the depths necessary for security will prove too great a task for one squadron to handle on some marches. Present British opinion apparently favors the attachment of one cooperative squadron to the mechanized force with a staff capable of handling another squadron, and a squadron of fighters if available. This appears sound, and is the same as our method of providing divisional Artillery with a staff capable of handling attached units.

A brief résumé of the rôle of aviation in the Ethiopian campaign will bring out several points which should be of interest. The lack of a well organized theatre of supply in the rear of the Ethiopian forces, which is true of most colonial wars, prevented the employment of the Air Force on its normal missions. It gradually worked into a rôle of close support of the ground forces, accomplished all strategic reconnaissance, much tactical reconnaissance and frequent command, courier and transport missions. Planes were used in many cases as aerial advance guards, bombing and shooting up resistance thus allowing the main body to proceed without interruption. Distant supply points and columns were bombed, generally in exploitation of a pursuit. Air Force activity during periods of ground reorganization kept the enemy from reorganizing and at the same time from regaining the means and will to resist. The continuous presence of close-support planes proved to be of great moral value to the ground arms. Mobile columns were often supplied by air. In one case a force of 20,000 men and 10,000 animals was supplied for a week. Rations, forage, ammunition, medical supplies,

mail, water, and even live animals to save refrigeration, were transported and delivered by parachute or landing. One point stands out, that air information of value is largely positive, and air information when negative must be verified by ground reconnaissance. Several surprises were experienced by the Italians because they neglected this point. In summarizing, the statement was made that the best use of air power seemed to be in exploitation of a pursuit acting as aerial cavalry. This may have been because they got more practice at pursuing than any other mission. However, much more could have been accomplished in cooperation with cavalry so as to round up and capture the defeated forces.

An article by a British officer who witnessed the Russian mechanized maneuvers of 1936 has a statement of interest in this general picture. The maneuvers involved five brigades of 1,200 to 1,400 vehicles. Only a few were seen disabled in the four days of maneuvers. To quote directly from the article—which is by Lieutenant Colonel Martel, of the British army, "Air bombardment and reconnaissance pave the way; the air bombardment may take the form of an air barrage on an obstacle such as a wide river with a view to isolating a considerable portion of the enemy country. Behind this air bombardment we follow up with mobile troops as the second wave; finally, as the third wave, comes the heavy or line holding troops who physically occupy and consolidate the gained ground."

"The essence of light tank brigades (mechanized cavalry) is independent action and mobility, that of the heavy infantry tanks is close cooperation and slow fighting on the battlefield."

The battle of Guadalajara, in which General Franco, last March, attempted to cut the main Madrid-Valencia highway, shows vividly the lack of air-ground cooperation and its effect. General Franco assembled two motorized Italian Divisions and pushed forward with great success. However, a destroyed bridge delayed the main body for hours, allowing the Loyalists to bring up reinforcements, and then several days of continuous rain began to take effect. The Italian aviation, mired down in temporary airdromes, was unable to cover the motorized columns. The 2nd Italian Division, stretched out for 20 kilometers on a single road and mired down in spots, was thrown into a panic by repeated Loyalist air attacks. The Loyalists operated from permanent, well-drained airdromes near Madrid, and were favored in their attacks by low misty ceilings. Perhaps the absence of hostile aviation in the Ethiopian campaign had made the Italians careless in exposing a long motorized column without adequate air protection. At any rate two points stand out; first, that the initial success of the Italians in Spain was due to surprise, caused by the Loyalists' failure to use their available airplanes for strategic reconnaissance; and second, that the Italians needlessly exposed their ground columns without adequate air protection.

To complete the historical picture and impress still further the necessity of cooperation, let me quote from Colonel H. Rowan Robinson, of the British Army, in his

book on mechanization: "The air army and the mechanized army need for the execution of their common task an association so close that no action undertaken by the one can be considered extraneously to its effect on the other. The question of landing grounds in the vicinity of force headquarters will therefore be one that can never be out of mind for a moment, and it may often influence the actual route taken."

MISSION

(a) In defining the rôle aviation will play in mechanized cavalry missions, the term aviation has been interpreted as including not only observation, but the air force as well. To decide upon the rôle of aviation, it is first necessary to define the missions of cavalry. In the opening lecture this year, General Daniel Van Voorhis made the following statements, "since its initial conception, the 7th Cavalry Brigade has adhered to its cavalry rôle. . . . The employment of mechanized cavalry differs little if any from the employment of horse cavalry, except as might be expected to result from the substitution of the machine for the horse."

(b) The Austrians have a light Division, composed of a mixture of light fast tanks, motorized infantry, horse dragoons, and artillery, more of a mixture than the German Panzer Corps. The Division is to be used on the following missions: Reconnaissance, screening, wide turning movements, operations against hostile flanks, and rear, speedy occupation of distant points, closing wide gaps in the line, exploitation of a pursuit, and the cover of retrograde movements. We are interested in the fact that all the missions mentioned for this mobile force are essentially cavalry missions, and are fully covered in mechanized cavalry missions as defined by the 1937-38 Training Directive, 7th Cavalry Brigade, shown on this chart.

MISSIONS

1. Offensive combat.
2. Long distance strategic reconnaissance.
3. Fighting for the theatre of reconnaissance.
4. Seizing points of strategic importance.
5. Tactical reconnaissance.
6. Pursuit of an enemy.
7. Delay of a hostile advance.
8. As an exploitation force to take advantage of any break or weakened portion of a hostile battle line.
9. As a part of a reserve to be used tactically or strategically.
10. Operating against enemy rear installations.

1. OFFENSIVE COMBAT.

(a) Counter Air Force is of primary importance to insure success.

(b) Strategic reconnaissance for the dual purpose of developing the objective and providing security.

(c) The objective may be isolated by cutting all approaches with the striking component of the air force, preventing the arrival of reinforcements. This will be the air barrage, mentioned previously, which consists of de-

stroying all passages over an obstacle, and preventing their repair by mustard gas and repeated attacks.

(d) Pursuit would offer a general area defense, or a special area protection for the actual operation.

(e) A strong air attack might be used to demoralize a strong enemy just prior to the attack of the mechanized force.

(f) The two vital periods in mechanized operations, the assembly for attack, and the assembly after attack, will require air protection. Fire can be brought on hostile anti-tank guns, and hostile tanks almost immediately after discovery from the air, and this is impossible with any other weapon.

(g) In combination, the air and mechanized forces offer a means of forcing a decision without a slow war of attrition, which at best offers a Pyrrhic victory.

2. LONG DISTANCE STRATEGIC RECONNAISSANCE.

(a) The G. H. Q. air force would aid in distant reconnaissance, followed up by the closer reconnaissance of the observation aviation attached to the mechanized force, and finally, verification on the ground.

(b) The primary rôle of aviation in this mission is reconnaissance, probably followed or interspersed with artillery adjustments, liaison and contact missions, courier and command missions, all normal duties of an observation squadron.

(c) If the mechanized force should have its supply line cut, supply by air does not offer great difficulty. All supplies except ammunition and gasoline are easy to transport. Huge quantities of ammunition would not be necessary, as mechanized tactics do not envisage prolonged action. With gasoline handled in small tins, what the transport squadron lacks in carrying capacity is made up for by its speed in making repeated trips. In addition, a small test outfit should be an integral part of the supply element, plus a small quantity of tetra-ethyl lead. Thus any gasoline found could be readily stepped up to the required octane rating and used at once.

3. FIGHTING FOR THE THEATRE OF RECONNAISSANCE.

(a) Counter air force is a primary mission for air, to aid in gaining control of the theatre of reconnaissance.

(b) Isolation of the area, in the form of an air barrage.

(c) Normal coöperative missions of observation.

4. SEIZING POINTS OF STRATEGIC IMPORTANCE.

Same as offensive combat.

5. TACTICAL RECONNAISSANCE.

Normal observation missions of coöperation, reconnaissance, artillery adjustments, liaison, courier and command missions.

6. PURSUIT OF AN ENEMY.

Here close coöperation of air and mechanized forces as in missions 1, 3 and 4 is of vital importance, and promises big returns. The air force by bombing bridges, attacking

columns in defiles, and repeatedly attacking the heads of retreating columns, can pin them down, cause further demoralization and allow them to be rounded up and captured. The mechanized force can be used as an encircling force while the air component isolated the area, delaying, or preventing arrival of reinforcements.

7. DELAY OF HOSTILE ADVANCE.

(a) As in all missions, the primary consideration will be counter air force operations.

(b) Cutting supply lines and disrupting rear area supply and communication organization, while the mechanized force acts offensively on the front and flanks, would be most effective in slowing up an advance.

(c) In addition, the normal cooperative security and battle missions of observation are necessary.

8. AS AN EXPLOITATION FORCE TO TAKE ADVANTAGE OF ANY BREAK OR WEAKENED PORTION OF A HOSTILE BATTLE LINE.

(a) The primary duty for air in an operation of this nature would be the delay or prevention of arrival of reinforcements.

(b) Reconnaissance, liaison, and battle missions.

9. AS A PART OF A RESERVE.

Normal observation missions when the unit is committed to action.

10. OPERATING AGAINST ENEMY REAR INSTALLATIONS.

(a) Although the idea of using cavalry massed in a strategic move against hostile flanks and rear is ancient, history shows few actual examples of such employment. In the large majority of cases cavalry if massed at all, has been held close to the flanks of the main body and its mobility has been used tactically, often, it is true, to excellent advantage.

(b) In a mission of this kind, counter air force, isolation of an area, and flank protection by an air barrage on an obstacle, would be the missions for the air force.

(c) Observation is essential for its reconnaissance, liaison and battle missions.

In all cooperation it must be kept in mind that the proper employment of air forces is more often than not for the future good rather than the present. It is wrong to sacrifice the several thousand mile range and high speed of bombardment to drop bombs on areas that can be reached by heavy artillery. The striking force should be employed against objectives which are out of reach of all other forces, and are most vital to the continued hostile effort.



R.O.T.C. Commendation

The annual R.O.T.C. Military Day review at the University of Illinois was held on May 26, 1938. The splendid appearance and able demonstration of the R.O.T.C. brigade elicited many commendatory statements. The following comment was made as one of many in the same vein:

"It is the desire of Post 630, Veterans of Foreign Wars, Champaign-Urbana, Illinois, to tender you our sincere congratulations upon the magnificent spectacle of the annual Military Day review of the R.O.T.C. brigade on May 26th.

"We feel that this exhibition should be a source of great pride to you, your staff, and to the University. After viewing the obvious enthusiasm and patriotism, and the extremely high degree of military efficiency of these young men, we feel that we can fervently echo the words of President Willard on that occasion, that 'the future of our democracy is in safe hands!'"

H. S. LEWIS, *Commander*,
Post 630, V.F.W., Urbana-Champaign.

CAVALRY ORGANIZATION

By Lieutenant-Colonel John J. Bohn, 9th Cavalry

ANTAEUS

An invincible wrestler in the old Greek mythology, invincible because his strength was renewed each time his feet touched the ground, Hercules throttled him while holding him up in the air.

* * * * *

Since the World War, cavalry organization has been weakened by being up in the air. Ignorance of World War cavalry operations, new and interesting mechanical development, lack of open warfare experience on the part of the American Army have all been factors contributing toward a condition of flux and change. Twenty years have elapsed since the World War, new equipment has been and is being tested in other wars, and all the powers are busily engaged in new war preparation. Our seven wars in the past 160 years have always come suddenly; we have always been unprepared and have paid through the nose for our lack of foresight. In our search for the ideal we have neglected the obvious and have been led this way and that by experts whose vision has been limited to the field of their specialties. We know enough right now, if we will but take cognizance of our knowledge, to forget ideals and build good, useful fighting organizations from existing material ready for immediate use in time of war.

IMPORTANCE OF ORGANIZATION

To organize, according to Webster's *Dictionary*, is to furnish with organs. In plain soldier talk, this may be expressed: to furnish with guts. An army or an arm without guts can not get ready for the serious business of war, let alone fight a war.

To the officer of the grade of colonel or above, details of organization may not be of supreme importance. Whether it be triangular or square, large or small, the general can work with it in the field, and if he be a skilled workman, he can get results. Consequently, the officer in high position does not worry unduly about peacetime organization.

The staff officer, the line major, captain, lieutenant and sergeant worry like hell about organization all the time because it is the kit of tools with which they work. If a squadron commander is given a mission to perform which requires scout cars, heavy machine guns, radio, anti-tank weapons, etc., these agencies must be attached for the job. The major may get them free gratis, he may have to ask for them, he may not get them, but in any case, he must borrow and assemble his tools before going to work. They are not HIS tools. His organization lacks guts.

Orders are all cluttered up with attachments and administrative details. The officers must think of something besides their missions, consequently, missions will suffer. The principle of simplicity is forgotten, and time, the only thing that is ever irretrievably lost by a cavalryman, is gone.

The regiment or larger unit suffers because men, armament, equipment are issued on Tables of Basic Allowances which in turn are based on approved Tables of Organization. Try to get these items if authority is lacking in the prescribed regulations.

Instructors at the schools and with the civilian components suffer because they teach employment of organizations which do not exist. The student upon return to his regiment is at a disadvantage because much is expected of him and he can not deliver the goods. Frontages, weapons, and tactics in his home station are at variance with those shown at the schools and he has a feeling of being cheated by theory and wasting a year of hard work.

Because of all this the spirit of the arm loses keenness and aggressiveness. We sneak and peek instead of boldly fighting with what we have. We become apologetic and our alibi is: "Well, with a war-strength outfit we could do so and so."

It is easy to see, when looking up from the bottom, that organization is vital to all men who carry weapons.

UNIQUE POSITION OF THE UNITED STATES AS REGARDS ORGANIZATION

The United States alone has no enlisted reserve of appreciable value. With the exception of England, all foreign countries can call TRAINED reserves in sufficient numbers to fill EXISTING organizations to war strength in time of emergency for maneuvers of war. Under our system, mobilization is started from scratch. War training with war organizations also starts from scratch. The result is that we have never been ready for war. With us it is a matter of many months before we can put an army in the field. Inactive units must be reconstituted, new units organized, old ones are robbed of key men and all must be equipped and trained. This is a national policy beyond our control, but this great difference should be recognized and the difficulty solved in advance by intelligent organization. The nations that have met this issue by national military training are talking turkey today to those that have not, and are gaining national objectives with little or no opposition. Our problem is a covering force or expeditionary force able to take the field at any time without delay incident to change in organization and the consequent necessity for war training.

REASONS FOR PRESENT CONDITIONS

It is a national characteristic of the American to decide momentous questions upon the grounds of sentiment and emotion rather than upon the premises of facts and conclusions. As a people we are idealists and dreamers. There are two outstanding reasons for our vacillation in matters of cavalry organization which have their beginning in our national character.

Our officers may feel that if we do not build up on paper big heavily armed organizations on units already in existence that the cavalry will not get its share of men, arms and equipment when the whistle blows. This feeling is fostered by the policy of not reconstituting inactive units in peacetime and by the feeling that the number of cavalry regiments in mobilization will be limited to those now in existence. This attitude may be justified but it is not a frank solution of our troubles. If it were understood that the number of cavalry regiments in war would be limited only by our resources in animals, the answers to questionnaires on cavalry organization would be quite different.

The other reason is just as cogent. Give any officer in the cavalry below the grade of colonel the task of making a Table of Organization. Without exception, he will start with a squad. We are all agreed there, seven men and a corporal. The instant we leave the squad for larger units disagreement begins and continues until final frustration. Consequently, lacking a united front we get nowhere with the War Department and fail to convince the arms and services that we know what we want. We are searching for the ideal. We build a theoretical dream of perfection, fall out of bed, bump into our practical limitations and go to war with what recruits and remounts we can scrape up on short notice. We go from squad to platoon, three or four squads, three or four platoons to the troop, two or three troops to the squadron, two or three squadrons to the regiment and from no brigade to two brigades to the division. As we progress we call in the experts who, being experts in their various lines and anxious to help us and themselves, add weapons, scout cars, communications, transportation, until we reach a goal beyond our practical limitations and beyond our ability to control and maneuver.

It is as easy as pie for any of us to build up a squadron of 500. The dumbest of us can reach a total of 1,600 or more for the regiment and our divisions are failures if they fail to total up to 10,000. We forget that the National Defense Act gave us a maximum of 20,000, that we really need four regular divisions and 27 reconnaissance units for our infantry divisions or at least nine of them for our infantry corps. We also forget that for hundreds of years brilliant cavalry operations have been carried on by cavalry units the size of our peacetime regiments, squadrons, troops, and platoons, although described under different names.

In striving for the ideal we have disagreed because all men's ideals differ. We need metes and bounds based upon practical facts, laid down by high authority within which we can go forward loyally and cheerfully to high achievement.

VALUE OF CAVALRY

The world now knows that war between strong countries is a national undertaking. Every workable resource is employed. To ignore or overlook a useful national resource is uneconomical folly. This country holds a unique

position in that it possesses a very large number of horses both draft and riding. These are military transportation units by far the most efficient within their sphere of any yet discovered, as will later be shown. Failure of the United States to take advantage of its commanding position in this respect is nothing short of idiotic.

Every animal suitable for military use should be counted, and earmarked for war. As an indication, the Department of Agriculture reports 490,000 horses in the State of Kansas at present. It is true that the majority of these are only suitable for agricultural purposes and will be needed and used for those purposes in time of war. Among them, however, there are a large number of individuals suitable for military use. A national census should be made by the Department of Agriculture, aided by the army, to determine our resources in this respect.

The total number available should determine the amount of cavalry to be mobilized in a major war on this continent. For every man in a combat regiment four horses should be counted: one per soldier in the field, one per soldier in a depot squadron being trained and conditioned, one per soldier in the remount establishment, and one in the hands of the dealers and breeders on his way to army service. In the matter of cavalry horse replacements we, in common with other nations, have started wars in the happy belief that the horses would live through. Soft horse replacements die like flies. An adequate flow of conditioned animals to the front is a military necessity of vital importance.

I believe that a census made on the above basis would show a sufficient number of animals to meet our contemplated requirements for twelve cavalry divisions plus divisional cavalry units at strengths which will later be indicated.

Failure to make use of this existing national asset for war is inexcusable because:

A war on this continent will involve open warfare. The whole western front of the World War could be located on the south boundary of the State of Kansas. Two western fronts would only occupy the river line of the Rio Grande in Texas, and a modern army of three corps of three divisions each, in column, would exceed the length of the western front by 100 miles. Can we stabilize on a position the flanks of which would be secure?

A war of movement implies mobility and IN WAR THERE IS NO MORE DECISIVE FACTOR THAN MOBILITY. War is also a race to seize and hold critical terrain. The airplane and the tank have mobility but they can not stop movement and live. They can not hold ground. The men in them can not get out and fight effectively. They are tremendously useful within their sphere but that sphere is not decisive.

Modern development has greatly added to the value of horse cavalry. The airplane, the tank, long-range artillery, all observing the roads, dismount the doughboy from his truck a day's march from the battle. He must make his approach march on foot, slowly and laboriously, and in the end must fight on his belly before he can advance, as

he had always done since the advent of the modern rifle and machine gun.

Our military leaders in high position have told the public and the service that the horse is still valuable in war, but they did not in all cases mention the obvious reasons and give strength to their statements by saying why. Some of the reasons are:

A horse is the only type of transportation that can transport soldier and weapons across country in approach formations, to battle, with comparative speed, sureness and safety. He can follow a path, a stream bed, a trail, or go through woods, mud, snow, sand, and water. No other means of transportation can do this. A horse has four speeds forward and can reverse in place. With his change of pace he is a good broken field runner, hard to hit and harder to stop. Did you ever hit a running buck at 400 yards? The horse will also follow a leader, a path, a streamline automatically, picking his way. The passenger does not have to give his full attention to steering. He has good observation and he is free to use his weapon. And in the final assault, when opportunity offers, the horse, once committed, will go through to the objective regardless of the personal courage of his rider. Nothing short of death, impassable obstacles, or determined resistance on the part of the rider will stop him. There are no stragglers from a cavalry charge. The soldier in any case arrives at the place to use his weapons comparatively fresh and with high morale. And best of all, the horse will continue to function without feed or water for many hours of valuable time. It is apparent that for open warfare we can not overlook the horse as a means of transportation.

There is no possible comparison between infantry and cavalry from the viewpoint of numerical strength unless cavalry is employed as mounted infantry. This should be exceptional. The power, speed and bulk of the horse makes such comparison ineffectual. Let me remind you that a few years ago a cavalry command made a march, in an unknown country without roads, of 142 miles in 42 hours, that this march was continued 450 miles in 13 days and nights and ended in a battle. Also during this period the impetus of supply from rear to front was dammed by rivers and mountains. There was no wheeled transportation. Remember that a machine gun or a rifle 50 miles or three miles away from a battle has no value in that battle. It is the position from which it is firing that counts.

* * * * *

The time has now arrived to plant our feet on the ground, gain strength, use our eyes and employ our common sense.

Many of us believe that the squadron should be the combat unit sufficient in itself to perform any cavalry mission commensurate with its strength.

Now let us look at the present peacetime regiment. It contains everything that the most ambitious of our majors and special experts think should be in a wartime squadron. It is the size and possesses the strength of a foreign war-strength regiment.

As we look at it closely, like an optical illusion, it changes from a peacestrength regiment to a warstrength reinforced squadron and back again. In reality by two different names it is the solution to our problem. Let the colonels fight their own regiments instead of watching two or three majors do their stuff after borrowing all the regimental equipment. It will expedite the battle.

Let us take this regiment, streamline it, give it a strength of 700 men and see what we can do with it. Four good troops with adequate fire support make a sweet team. Cocked by proper deployment they can hit quick and hard on either or both flanks and still have a decisive reserve for the final K.O.

Four such regiments, together with an artillery battalion of four batteries of six guns each, gives us a strength of 3,660 fighting men and 24 guns. Add overhead, engineers, medical, supply, etc., and we arrive at an organization of approximately 5,000. This division has the organs: it has mobility, it has fighting strength and it lends itself to A MOST IMPORTANT CHARACTERISTIC. It has IDENTICAL ORGANIZATION for BOTH PEACE AND WAR, and can comply with the War Department training directive. It will provide "effective fighting units and competent leaders ready for field service." The officer who rises rapidly to high cavalry command in time of war will find in this division a fighting unit ready to his hands. The plays will be the same. He will know them by heart before he issues his first order. We do well only that which we do often. We can not wait for the game before we practice.

In addition to these masses of cavalry, divisional cavalry is needed. Considering the frontages upon which an infantry division attacks or defends, and the width of the approach march of a division, one troop per division is enough, if this principle is adhered to: THE TWO DUTIES OF SPECIAL RECONNAISSANCE AND SECURITY SHOULD NEVER BE ALLOTTED TO THE SAME BODY OF CAVALRY.

In conclusion, let me ask a question. Is there a cavalry officer of field grade who would not welcome the chance to command one of the above described divisions in war? "If such there be go mark him well."

SUPPLY BY AIR TO CAVALRY

By Second Lieutenant Roy W. Cole, Jr., 8th Cavalry

Few of the many and varied tests conducted by the 1st Cavalry Division in its recent maneuvers near Balmorhea, Texas, has aroused more comment, both in official circles and in the press, than the successful air supply of a cavalry unit. This cooperation between the Air Corps and the Cavalry is, it is believed, the first serious attempt of our army to test the practicability of an idea already demonstrated by the Italian forces in Ethiopia. The results obtained in the experiment of subsisting an isolated platoon entirely by air transport substantiated the expectations of all concerned.

The genesis of the test was formulated in a letter from Major General Leon B. Kromer, the then Chief of Cavalry, to the Adjutant General requesting that the 1st Cavalry Division be supplied by air transport for one week during its coming maneuvers in April and May. Reference to the Chief of Air Corps brought out the fact that the 70 cargo planes to carry the 114 ton daily supply could not be made available, and consequently, such a large scale operation was not practicable. After voluminous indorsements to the original letter, it was finally decided to sub-sist one platoon of cavalry operating on an independent mission where enemy activity was such that it could not be supplied by either pack trains or by the organic transportation of cavalry.

In general, in the conduct of the test, the following factors affecting the necessity of supply by air transport were considered:

1. Air transport may be employed to supplement ground transport when, for any reason, the latter is unable to deliver the necessary supplies at the proper time.

2. Air transport may be employed to supply a unit whose lines of communication have been cut off by enemy operation, or which has been marooned by flood or by other disaster which prevents its being supplied by ordinary means.

3. Air transport may be employed to supply a unit in difficult terrain where ground transport would be too slow. Factors entering into this situation would be

- a. Is the organic transportation of the unit able to accompany it?

- b. If not, is the unit reinforced by pack trains?

- c. Is long forage available, is grazing practical, or must compressed forage be supplied?

- d. Is combat involving greater than normal ammunition supply contemplated?

In addition to the above governing the necessity of air supply, certain technical details were studied. These included the most suitable type of food containers, and the method of packing the necessary forage. Also the best type of plane required, and the mechanism in the plane for releasing the load. Other considerations were the different articles of food which were capable of being dropped, what arrangement must be made by the force being

supplied concerning the procedure at the dropping ground, including the collection and care of the parachutes and containers. Finally what special liaison measures would be required?

The 1st Platoon, Troop A, 8th Cavalry, with 2d Lieut. Roy W. Cole, Jr. attached, in command, and with Capt. William J. Reardon as Umpire, was selected for the test. On the evening of April 13th at Fort Hancock, Texas, the following order was delivered to the commander of the test platoon:

HEADQUARTERS 2D PROVISIONAL CAVALRY
Ft. Hancock, Texas

April 13, 1938.

FIELD ORDER)
No. 7

Maps: Maneuver Map 1: 125,000

1. (a) War is to be assumed declared between Blue—east, and White—west, on April 10, 1938. The main forces of these states are engaged along the PECOS RIVER, the boundary in central NEW MEXICO.

- (b) No enemy forces are known to be south of NEW MEXICO, except one regiment of cavalry and some attached troops, reported to be operating east of the PECOS RIVER near its junction with the RIO GRANDE. Our intelligence service reports that the enemy is collecting supplies in the vicinity of BALMORHEA, TEXAS.

2. This regiment marches tomorrow on BALMORHEA, TEXAS, via route U. S. 80 and U. S. 290, to destroy enemy supplies in vicinity of that place.

3. Lieutenant Cole, 1st Platoon, Troop A, 8th Cavalry with 1 Radio Pack Set attached will march at 6:00 AM tomorrow on TOYAHVALE via ESPERANZA—ROCK SCHOOL—LOVES WELL No. 3—HOT WELLS—VALENTINE—FORT DAVIS. You will reconnoiter these places and halt for the night as follows: (See Sketch).

ESPERANZA	Apr 14
ROCK SCHOOL	Apr 15
LOVES WELL	Apr 16
HOT WELLS	Apr 17
VALENTINE	Apr 18
FT. DAVIS	Apr 19

Rejoin at TOYAHVALE not later than noon, 20th April.

Report any enemy troops encountered the size of a Platoon or larger. Positive or negative information is desired upon arrival at above localities.

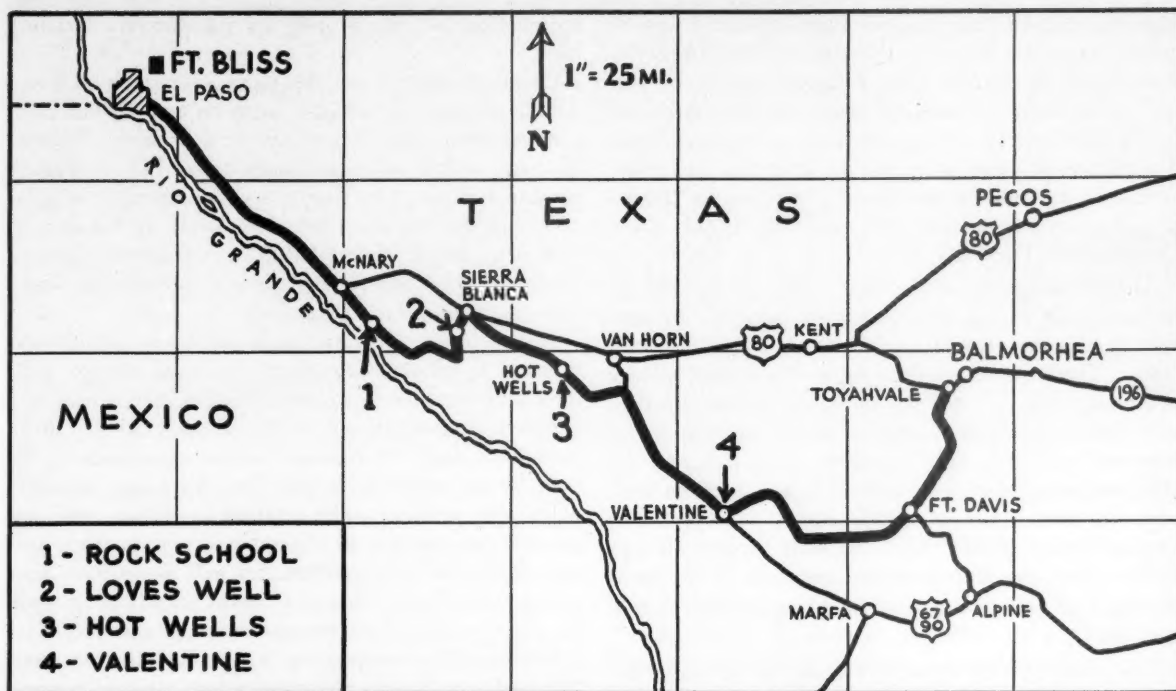
4. Administrative matters have been covered.

5. Messages to me at head of main body.

SWIFT

Colonel.

On the morning of the 14th in accordance with its instructions, the platoon left the column of the 2d Pro-



Dropping grounds established by test platoons en route to Balmorhea, Texas.

visional Cavalry (the initial maneuver organization of the 7th and 8th Cavalry Regiments) marching on Balmorhea, and proceeded the 14.6 miles to Esperanza. A careful reconnaissance indicated no enemy to be in the vicinity, so the platoon made camp in a grove of cottonwoods beside the Rio Grande. The required information was sent to the column by the platoons' attached pack radio, and at 7:15 PM, the following message was received: "Due to intense enemy activity, all efforts to supply you have failed. Until further orders Class I supplies will be furnished you daily by air transport."

Another easy march was made on the 15th to Rock School, and, after radioing the column the negative information of the enemy, the platoon established camp by the river. Plans had been made with Major Guy Kirksey, the Air Corps coordinator of the test, to use the system of panel signals shown in the accompanying diagram.

A short reconnaissance was made to find a satisfactory dropping ground. The only stipulation the Air Corps made was that it be at least 200 yards to the left or right of the camp site—the idea being that if the plane were forced to fly directly over the camp while discharging its cargo, disastrous consequences might ensue. The hay bales and sacks of wood were to be "bombed," as previous experiments had proved this method to be sound, while the food containers and oat sacks were to be packed with parachutes. Therefore, a slight miscalculation on the part of the "bomber" or a parachute failure might bring on an accident if the camp were in the line of flight. After a suitable place had been found convenient to the camp, Panel I was displayed, and smoke pots were held in readiness to guide the plane on its mission.

At 12:05 PM, the plane, a Martin B-18, appeared, escorted by two photographic and observation planes. Guided by the smoke and panels, the pilot quickly located the dropping ground, and after a preliminary circle at about 600 feet, the first chute load of the test blossomed out and drifted earthward. The entire platoon (less a disappointed picket line guard), a group of school children released from their studies for the occasion, and several neighboring ranchers, took up advantageous positions with the official and unofficial photographers and enjoyed the proceedings immensely. On each sweeping circle, a food container or oat sack would be released and float to a landing on the mesquite, or a bale of hay or sack of firewood would plunge to earth. The tightly baled hay bounced six to eight feet as it landed, while the 100 pound sacks of wood disintegrated into individual sticks as the burlap was torn into shreds by the force of the impact.

The dropping was completed without mishap, and after seeing the red cross panel displayed by the panel crew, the plane headed back to its base at Fort Bliss, Texas. A detail was sent to gather the supplies and bring them into camp where an inventory was taken which showed that 1,240 pounds of rations, forage, and wood had been delivered. One parachute failed to open, and upon examination it was found that its container held 32 oranges of which 12 had burst and mingled their juices with the sawdust packing. Five dozen eggs were among the articles dropped, and only two were broken.

The test platoon reconnoitered Loves Well, Hot Wells, and Valentine on the following days, being subsisted by air at the end of each day's march. At Valentine, after establishing its daily contact with the main body, a mes-

sage was received from Colonel Swift indicating that all enemy forces had retired to the east and that for the remainder of the march, Class I supplies would be furnished by truck. The test was over, and there remained for the platoon only the mission of continuing the march. The platoon averaged 35 miles a day from the 17th to the 20th, and rejoined the main column in time for the expected meeting engagement with the First Brigade of the Division near Toyahvale.

The following observations and comments are believed pertinent: Of the 34 food containers dropped, 20 were split near the top, apparently by the opening of the parachute. Three food container 'chutes failed: two holding oranges the majority of which burst, and one bread which was slightly crushed. A total of nine dozen eggs were supplied, with only eight casualties which indicated the efficient method of packing, and the lack of shock on landing. All human rations, except bread, were placed in sawdust in five gallon milk cans with screwed on tops held in parachute-topped canvas containers. (The bread was packed without the sawdust, being tightly wedged into place.)

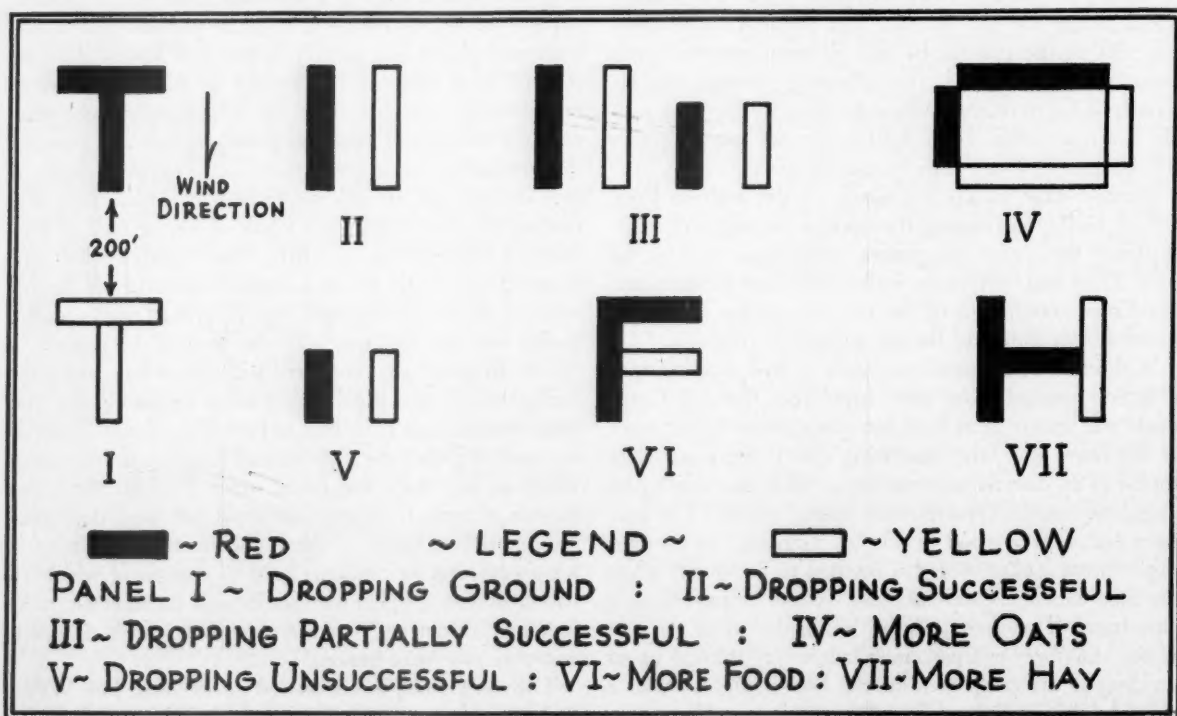
The complete field ration was issued, no allowance being made for the method of supply, and the menus were excellent. For example, on Easter Sunday the platoon ate stewed chicken, mashed potatoes, peas, beans, apricots, head lettuce, jam, bread, butter, and coffee for dinner, and the other meals were correspondingly good. Each container, holding approximately 18 pounds of food was

returned to the column daily by the platoon's attached truck.

Of the 28 bales of hay, weighing 600 pounds each and double wrapped in burlap, 7 burst on landing but none were scattered so badly as to prevent their being collected. The oats came in 125 pound sacks attached to condemned personnel 'chutes. One slipped from its carrier as the parachute opened and was a total loss, while the contents of two sacks whose 'chutes failed were scattered over the landscape. No attempt was made to prevent the wood from breaking out of its container.

In conclusion, a gross weight of 5,710 pounds was dropped on the four days of the test in an average daily time of 27 minutes. It appears that air supply is relatively simple and practical, and, if the necessity arises, can be used successfully to maintain isolated commands in the field for an indefinite period. The Air Corps members of the test, working under cramped conditions, with improvised equipment in an unsuitable type plane, performed remarkably well on a mission that well might have been distasteful to them—that of a combat branch being made the supply means of another combat arm of the service. Its splendid spirit of coöperation was perhaps best exemplified on Easter Sunday afternoon, when, after discharging its cargo and being told that the platoon was short one sack of oats and one bale of hay, the pilot made an extra trip of some 250 miles to deliver the highest priced forage on record!

EDITOR'S NOTE: For photographs, see Frontispiece CAVALRY JOURNAL, May-June, 1938.



Armor For Horse Cavalry Reconnaissance Vehicles?

By MAJOR CLINTON A. PIERCE, 8th Cavalry

In the present horse cavalry organization three types of armored vehicles are included. They are:

1. **Combat Cars:** Track-laying vehicles, with cross country mobility, armor and armament. These cars are included because they are fighting vehicles, intended to close with the enemy, frontally, on his flanks or rear. They are light tanks used to assist the horse cavalry to maneuver its fire power on the battlefield. From the missions expected of these cars there is no doubt that they require armor.

2. **Armored Cars:** Wheeled vehicles with great road mobility, armor and armament. They have no combat cross country mobility. These cars are included because they are reconnaissance vehicles, intended to search the roads available to the enemy and report the information thus collected. They are the distant ground eyes of the horse cavalry commander. After locating the enemy, possibly with the assistance of observation aviation, and reporting the required information, these cars can be used to delay the enemy by the use of their fire power and force the enemy to leave the roads and move cross-country. If no delay is directed, they can be sent on available roads to observe and report the situation on the hostile flanks and rear. These cars are not fighting vehicles. They are not intended to close with the enemy. To use a worn phrase, they "sneak, peek, shoot and run." They "sneak, peek and run" on reconnaissance missions, using their road mobility and the available road net to secure information. They "shoot" only when necessary, usually at long ranges, from road positions, to delay the enemy, harass him and make him deploy, and then they "run," before the enemy can close with them. Armored cars are the reconnaissance vehicles assigned for the use of the division commander.

3. **Scout Cars:** Wheeled vehicles with the same general characteristics as armored cars and the same missions. They are the horse cavalry regimental commander's reconnaissance vehicles. These cars "sneak, peek, shoot and run" as outlined for armored cars. They have no combat cross-country mobility. They are not fighting vehicles.

The question to be answered is whether the reconnaissance vehicles, 2 and 3 above, need armor.

To arrive at a logical conclusion based upon the missions expected of these cars, the following points must be considered with reference to whether armor helps or hinders them:

a. *Mobility on roads.* Armor increases the weight of the car. With the powerful engines now available and with the relative slow speeds required on roads, it appears that the extra weight contributed by armor has little effect on the road speed of reconnaissance cars. Road mobility, then is not affected by the presence or absence of armor.

b. *Cross-country mobility.* The present types of reconnaissance cars are not good cross-country vehicles, primarily because of their great weight. This weight is appreciably affected by armor. If they had no armor they would be lighter and this loss of weight would contribute to an increase in cross-country mobility. Greater cross-country mobility would be a valuable asset for reconnaissance vehicles. Cross country mobility then would be helped if the armor was removed from reconnaissance cars.

c. *Visibility for observers.* The present type of reconnaissance vehicle is difficult to observe from unless the observer gets his head above the armor. The observation slits in the armored cars are inadequate and the observers are always seen with head and shoulders protruding from the turret. The scout cars are so designed that the observers usually stand up to observe. The head and shoulders are usually above the armor. Armor then does not contribute to better visibility for the observers.

d. *Use of fire power.* All reconnaissance vehicles have machine guns both caliber .30 and caliber .50. In the armored car and scout car the presence of armor constricts the deflection or rapid traverse of all weapons designed for use against an enemy on the ground. Without armor all guns could be mounted, possibly on pedestal mounts, to permit all-round traverse with more ease than at present. Armor then restricts the use of weapons on reconnaissance vehicles.

e. *Silhouette.* With or without camouflage, the present reconnaissance vehicles can be seen at a great distance. This is a disadvantage to a reconnaissance agency. This is due partly to the size of the cars. The size of these ve-

hicles is contributed to by armor. Without armor the cars could be made smaller. If they were smaller they could be seen less easily. Armor then contributes to the large silhouette of reconnaissance vehicles and is not a helpful characteristic.

f. *Gas and Oil Consumption.* The heavier the motor vehicle and the larger its power unit, the greater the fuel consumption. Armor adds to size and weight, thus increasing the consumption of fuel. The more fuel used per mile of travel the less range the vehicle has, and the more frequent are its refills. On reconnaissance the greater the range of the vehicles on one fill of gas and oil the more territory can be covered before the car has to return to a base of supplies. To remove the armor from these vehicles will lighten them, and permit a reduction in gas and oil consumption per mile. Armor, then, adds to gas and oil consumption and is a disadvantage.

g. *Replacement.* Replacement of matériel is necessary in war. The more complicated the piece of matériel, the harder it is to manufacture and thus replace. The addition of armor to reconnaissance vehicles causes an additional echelon in manufacture. This, then, slows up the speed of replacement. That cavalry reconnaissance vehicles will need to be replaced rapidly and in large numbers because of mechanical break-down and actual battle casualties, seems probable. Armor then will delay replacement. This is a disadvantage.

h. *Protection of Crew and Engine.* Armor is designed for protection against bullets. The race between armor and bullets has developed to the point where thick armor is necessary for absolute protection. The armor on cavalry reconnaissance vehicles is not thick enough to give absolute protection. If absolute protection is required the cars will doubtless become too heavy for the missions now assigned them.

Protection of the observers and engine, so that the information can be gathered and sent back is excellent, if the amount of armor decided necessary to provide protection does not make the vehicle so heavy and unwieldy as to defeat the execution of the mission.

Armor, then, on reconnaissance vehicles is an advantage, if it provides absolute protection for the observers and mechanical parts of the car. However, since the weight of armor to provide absolute protection will probably increase the weight of the cars to a point that will interfere with its missions, its advantage to horse cavalry is doubted.

i. *Morale factor for observers and crew.* The present armor on cavalry reconnaissance vehicles affects the morale of the crew. It breeds in the crew a disregard of enemy bullets. While this is laudible it can work to the detriment of the crew. It furnishes an unwanted incentive to "fight the cars." To use the cavalry reconnaissance

cars as combat cars is a definite violation of the reasons for the cars' existence in horse cavalry.

Again, the armor on the present cars is not of sufficient thickness to provide protection. If, by the presence of this armor, the crew becomes too enthusiastic and too bold, unnecessary casualties, both men and cars, can be predicted.

It is believed that the cars, if unarmored, would not be used as mobile machine gun nests, but would be maneuvered, by the car commanders with a strict regard to the capabilities of enemy fire.

Armor then, as a morale factor is of doubtful value.

Conclusions:

If the present armor on cavalry reconnaissance cars is of no great assistance, as outlined in the preceding statements, why have armor at all?

Armor of great thickness cannot advantageously be placed on these cars without materially reducing their value as reconnaissance agencies.

The only possible place that heavy armor, affording absolute protection, can profitably be used is around the power unit. The advantage of this amount of armor is doubtful. If replacement of the cars can be made quickly, the necessity of armored power-units is as unnecessary on reconnaissance cars as on supply trucks.

The question of replacement assumes large proportions. A solution would be to adopt a standardized make of light four-wheel drive truck of a ton or ton and one-half capacity. To add to its ease of replacement, eliminate the armor and the other gadgets that now tend to make the reconnaissance vehicles "fighting" or combat cars. Cut down the silhouette by reducing the size of the car to accommodate a crew of a driver and an observer who can fire a machine gun and work a radio. Cut out the large driver's cab and the high sides of the car. Install a simple pedestal mount that can accommodate one or two machine guns that then can have all-around traverse. Put the radio under the instrument board as they now do in private cars and police cars. Have a large gas tank and a large reserve oil container.

In short, if the cavalry reconnaissance cars, by elimination of armor, can:

- a. Increase road mobility
- b. Reduce silhouette
- c. Increase visibility for observers
- d. Decrease fuel consumption per mile, thus increasing the range
- e. Increase the effectiveness of weapons
- f. Increase the speed and ease of replacement
- g. Increase cross country mobility
- h. Reduce the temptation to use reconnaissance cars as fighting vehicles,

why eliminate armor from horse cavalry reconnaissance vehicles?

Opportunist Operations

By James Anthony Reilly

*For all your days prepare
And meet them ever alike
When you are the anvil, bear
When you are the hammer, strike.*

—EDWIN MARKHAM.

Military operations of strategical and tactical nature are generally accepted as being divided into two basic classes: offensive and defensive. But there is a third class, not so widely recognized nor of such definite characteristics but possessing possibilities of application especially suitable to modern warfare. Standing between the other two, it approaches perfection in the conduct of campaigns and the prosecution of a war. We can best define this class of military operations and commanders who favor it as "Opportunist."

The dictionary definition of "opportunist" is: "One who governs his course by opportunities or circumstances rather than by fixed principles."* That could almost be taken as a description of the ideal commander for the wars of the future, for though war definitely has its fixed principles they are broad enough to permit wide freedom of action. Intelligent and decisive strategical or tactical opportunism always can be reconciled with strict observance of the principles of war. In fact, in their entirety the principles of war sanction opportunism, and the simultaneous application of several of them would require a large measure of opportunist thinking and action.

Yet opportunism is not encouraged, the knack for it is not developed in current military education. The policy is to advocate positive commitment to one or the other of the two accepted types of action, with all the emphasis on the offensive. The offensive is only one principle of war and should not overshadow the others, for they also must be observed for victory at reasonable cost to the nation. Indiscriminate application of, and bullheaded adherence to the Principle of the Offensive would violate the Principles of the Mass, Surprise, Security. And it would come dangerously close to violation of the first principle of war, the Principle of the Objective, for a foolish offensive is definitely the most deadly military mistake, sure to endanger all plans and aims and hazard the attainment of the objective. But an opportunist offensive is the very essence and spirit of the Principle of the Offensive.

Military opportunism is the practice of seizing every opportunity, gaining every advantage possible and exploiting every situation to the fullest favorable extent without regard for the more conventional conceptions of the of-

fensive and the defensive. It is largely based on military intelligence: strategical opportunism on War Department intelligence and tactical opportunism on combat intelligence. It could not be followed by an army without a good intelligence organization, nor could it be employed by an army without a component with the mobility and capabilities of cavalry for the special and sudden actions that are a feature of opportunist operations.

Guided by knowledge of the situation, combat common sense and reasonable caution, the quick thinking opportunist is the most dangerous of opponents, far more formidable than either the offensive or defensive fighter. He does not dissipate his forces in futile offensives because he does not know what to do and must cover his quandary by attacking; nor does he sluggishly stay on the defensive in the face of passing opportunities to deal a telling blow. He is ready for everything because he is never rigidly committed to anything. The slightest mistake in his presence is fatal. He is the leader every officer with the vigor and versatility of youth dreams of being: stubbornly defending where the situation calls for defense; suddenly and *skillfully* attacking when an opportunity for an effective offensive is developed; marching and counter-marching with rapidity and purpose; cutting communications, destroying stores, disrupting plans of the enemy, and all with the dominating consideration for the economy of resources and conservation of manpower so necessary with the insatiable gluttony of modern war. It is easy to picture him as a cavalry officer, with the versatility and adaptability characteristic of his arm. It is obvious from the evolution of warfare since 1914 that this is the way future wars must be won. Cavalry's suitability to such warfare needs no mention. Suffice it to say that the type of missions that have always been cavalry's specialty will be many and of key importance in the operations of an opportunist commander with a truly twentieth century conception of war.

Of course, only the offensive can bring victory. But military history is full of offensives that brought defeat. Many of these disastrous offensives were as well conceived as those which are the models of victorious effectiveness. But in each case something was wrong. Some angle of the situation, the time, the weather, the psychological condition of the troops or any one of a hundred other factors of battle was not propitious for an offensive. In many of these instances, if an opportunist defensive had been maintained pending some change in the situation, perhaps some causated development which would have created a favorable opportunity for aggressive action, success might have crowned the offensive. Doing the right thing

*Funk & Wagnalls Comprehensive Standard Dictionary.

at the right time is a condensation of the science of war. "When you are the anvil, bear; when you are the hammer, strike" could be a concise FSR.

We roll back the years to a June Sunday in 1815. French infantry is charging up a Belgian ridge against an enemy strong in numbers and position and unshaken by the almost two hours fighting which preceded this charge. The attack is well planned; seventy-four guns well forward of the infantry's line of departure give powerful support. But something indefinable is wrong. The situation is not ripe for an attack. *The opportune moment has not arrived.* The charging infantry is stopped; the confusion and fear that results from uncertainty is among them. Suddenly enemy cavalry is also among them, thrusting, slashing and riding them down as they flee down the slope. The horsemen then head for the guns and saber their crews and horses. The seventy-four guns, which are almost one-third the French artillery, will stand there unmanned and unmoved for the duration of the battle.

The failure of this unwise attack, defeated principally by the opportunist cavalry counterattack, and the resultant loss of the guns is the leading factor in making the name of a nearby village a synonym for defeat. The word "Waterloo" should ever be a concise reminder to sensible soldiers that the spirit of the offensive is not enough; that there must also be the opportunity, and it must be seen—and seized.

The lesson of this epochal battle is all the more impressive when we realize that behind those French lines was the great master of maneuver whose ingenuity could have found a better way had not years of success made him an indiscriminate offensive fighter and dulled his knack for the opportunism which was his genius.

If unwise offensives whether minor or great were dangerous in former times they are fatal today, for the whole science of war has made tremendous advances, particularly in the years since the World War. In respect for this fact we must accept the lessons of the wars of the past, even of the classic campaigns, with mental reservations. Many things that went over then would go under now. It must be remembered that in the wars of past centuries, to which we turn so often for study of the unchangeable principles of war, a good aggressive bluff would go further than it would today; a wrong move would frequently pass unnoticed and perhaps even succeed in its purpose.

This was due to the military ignorance and ineptitude of many commanders and their subordinate officers, the majority of whom held their commissions and commands by accident of birth or royal favor rather than personal qualifications and professional skill, and whose military education was often more formal and traditional than practical. But modern military education has changed all that. Today the average captain has a knowledge of his calling surpassing that of the average general of the nineteenth century. Officers of the armies of all first and second-class powers are military scientists, highly schooled and widely read in the science of war and bring to their

first battlefield a treasure of the cream of experience from a hundred wars of the past.

Military organization is also better, staff work has advanced to an exact science, signal communications are highly developed and mobility is greater. In future wars a wrong decision or bad move will be quickly recognized and will bring a thunderclap of enemy action to seize advantage of it. A commander's first false move will usually be his last; if he survives his ill-fated command the road to the rear will beckon, for one strike and out is the rule in war.

Bad decisions and false moves in the swiftly moving modern warfare can be avoided only by assiduously following the hour-to-hour developments with a view to making the most of every opportunity; ready for a tenacious defensive and prepared for a sudden offensive but not unalterably committed to either. Perhaps this is not entirely in accord with the doctrine of the day, but doctrines and developments are seldom really abreast, appearances to the contrary notwithstanding. Consequently new thought, however unorthodox, must be thoroughly considered, for if there is one lesson in military history it is that the doctrines of today are the disasters of tomorrow.

The developments of recent years, the efficiency of modern staff work, particularly that of G2, the increased mobility and flexibility of our new type organizations will facilitate opportunist strategy and tactics. But the first requisites are commanders with mental mobility and flexibility to match that of the forces they lead. The unimaginative plodder, that definite military type that has always risen to high command in every army through methodical efficiency in routine and steadiness of character, commendable qualities though they are, could never be an opportunist.

We need the plodder for his abilities and his steadying influence on the exciting confusion of war. But we need more urgently the deeply discerning, imaginative, resourceful and decisive opportunist, for he is the one who can bring victory out of the quick changing situations and swiftly moving events of modern war.

This type leader will also have the aptitude for the tactical trickery that is surely destined to play a large part in future wars. Trickery was prominent in the tactics of ancient battle; it is in a large sense the gauge by which we measure the abilities of ancient commanders. Alexander, Hannibal and Caesar were superb tactical tricksters and are accepted today as the three Great Captains of ancient times. In recent times mass has largely supplanted wiles and ruses in tactics. This was particularly true in the World War, where great efforts were made at strategical deception and surprise but the great possibilities inherent in widespread tactical application of these same principles evidently escaped perception.

But the pendulum is plainly swinging back. Speedy motorized marches, the great fire power of infantry, the capabilities of modern cavalry, the utility of attack aviation, radio communication, mechanization and many other new factors of battle provide means for opportunist tactical

trickery, full scope for ingenious commanders and imperative need for adroit leaders of opportunist leanings. In the execution of the tactical trickery that will surely feature future wars cavalry will be the most indispensable element of a force.

Present developments herald the approach of an era in warfare in which the opportunist will be supreme; mystifying, deceiving and worrying the enemy every hour; frustrating his designs and exploiting his errors, passing from the offensive to the defensive and back again with a facile flexibility impossible of attainment for a more conventional commander.

Passing from the defensive to the offensive is admittedly one of the most difficult feats in warfare, but the difficulty is mainly psychological. When the troops have the battle-born confidence that the commander "knows what he's doin'," the difficulties peculiar to this operation vanish.

An excellent example of this fact can be found on that same Belgian ridge where we saw the inopportune attack that decided the dreary destiny of the man who had been the world's greatest military leader. From noonday until eight o'clock in the evening the Duke of Wellington's troops withstood the offensive action of the French. On their right Marshal Reille stormed Hougomont Farm, a group of stone houses prepared as centers of resistance, for eight solid hours. On their left Marshal D'Erlon delivered several vigorous attacks, the first of which was the one we considered earlier. On their center Marshal Ney had attacked with 5,000 cavalry. And except for some minor counter-offensive cavalry actions, the British and their allies were on the defensive all through the engagement.

There was more than sufficient time for the troops to develop that state of mind which makes passing from the defensive to the offensive so difficult. But the Iron Duke had the confidence of his men. And when, in the gathering twilight of the day and the Empire, with Reille still pounding at Hougomont, ten battalions of the Guard led by Ney came storming up the slopes in Napoleon's last attack, the defenders broke the attack with their defensive fires and, passing to the offensive, attacked all along the line and achieved one of the world's great victories.

In the battle of Waterloo Wellington saw and seized opportunities; Napoleon hardly bothered to look for them, favoring the Principle of Mass. His attacks were random thrusts which showed no talent for timing nor knack for knowing the vital spots in the enemy's line, depending solely on sheer force for success. Such crudeness

in an offensive against an opportunist like Wellington was bound to be disastrous.

Future wars will see many battles, which, like Waterloo, will be contests between the offensive and opportunism. Cavalry's greatest future successes lay in the latter. Modern warfare offers such a fertile field for opportunism that opportunist commanders are certain to appear in considerable numbers. They and their methods will be disapproved by more staid military dignitaries who will prefer to see the opportunists as flighty and unreliable, and themselves and their rigidity as representing the true art of war. They will be like the Austrian generals of 1797 who deplored the unorthodox methods of young General Bonaparte, who flouted every conventionality of warfare—but always won. They preferred the old ways even in spite of Bonaparte's brilliant successes, and used them again and again against him, bringing repeated defeats and disasters upon themselves. Their modern prototype will probably continue his preference for established methods even when modern opportunism proves itself in the laboratory of war.

In the future the laboratory of war will doubtless continue its age-old disillusion of military theorists. It will turn out evidence that many of the things thought to be principles of war are just current conventionalities. One of these probably will be the fetish of holding the initiative. "Sacrificing the initiative to the enemy" is by present standards little above treason. But purposefully sacrificing the initiative to an enemy commander with an indicated or demonstrated proclivity for bad moves, or subtly forcing the initiative upon an enemy obviously at a loss as to the real situation is intelligent and proper, our archaic standards notwithstanding. By such action the enemy can be led to assist in his own defeat, which can then best be accomplished by an opportunist counter-offensive. Delivering the punch as a counteraction is usually more effective and less expensive than a crude offensive which depends on sheer force for success.

Crudeness in the offensive and dependence on sheer force for success are not yet things of the past. They have their advocates in all armies. But current developments in the evolution of warfare presage their passing and future Waterloos await the armies with commanders who cannot see it; who prefer force to finesse, crudeness to cleverness, rigidity to flexibility. On their preference the decline of great nations might hinge, for we live in an age of seriously conflicting national interests.



True discipline is based neither on fear nor on any superficial qualities. It is based primarily on the moral attributes of loyalty, confidence, moral courage, determination and a high sense of duty. It is consistent in every way with that freedom which is the foundation of democracy, and, in fact, might be likened to a beacon giving direction to that freedom.—*Canadian Defence Quarterly*.

Defense Against Air Attack

By Captain Charles H. Noble, 2nd Cavalry



The question raised by the Chief of Cavalry: "What is the prescribed system of defense against attack aviation in your regiment?" is a very interesting and important subject. We have heard many officers say that small, isolated cavalry commands will not usually be a target of enough importance to be bothered by hostile aviation. The war in Spain seems to disprove this statement as no loyalist or insurgent target of troops or even non-combatants seems too small to escape hostile harassing action. What is a *small* command and when is it *isolated*? In China we have read of small detachments of Chinese troops throwing themselves headlong in holes and ditches when only a hostile observation plane occupied by an American correspondent and a Japanese pilot and observer passed harmlessly overhead. If our mission is of enough importance or if the enemy is attempting to break down our morale it seems that no command, however small, which presents a good target to aggressive enemy aviation will escape severe casualties.

In attempting to study our past mistakes and better our future protective measures against aircraft it seems to me we should first get a vivid picture of what a hostile air attack will be like. Our Air Corps friends tell us that the planes will come at us flying fairly low on a concealed route. The sun may be directly in our eyes. They will come at us suddenly over a ridge, not down an open road, spraying fire from at least four machine guns in each plane. When at the proper range numerous fragmentation bombs, each bursting into 840 steel fragments, will be dropped. The radius of effective burst is about 25 yards per bomb. The steel fragments, jagged and sharp and at white heat, have been known to penetrate considerable armor. From 12 to 16 bombs can be dropped from each plane.

On a recent test a platoon of infantry was subjected to an air attack. The platoon dispersed as rapidly as possible

and simulated fire against the three planes. The position of each man was carefully marked and a kneeling silhouette target was placed where each man had actually been when the planes passed overhead. The planes attacked again with live fragmentation bombs and nearly every target in the entire platoon received one or more fatal hits. What to do? *Disperse and take cover. FIRST!*

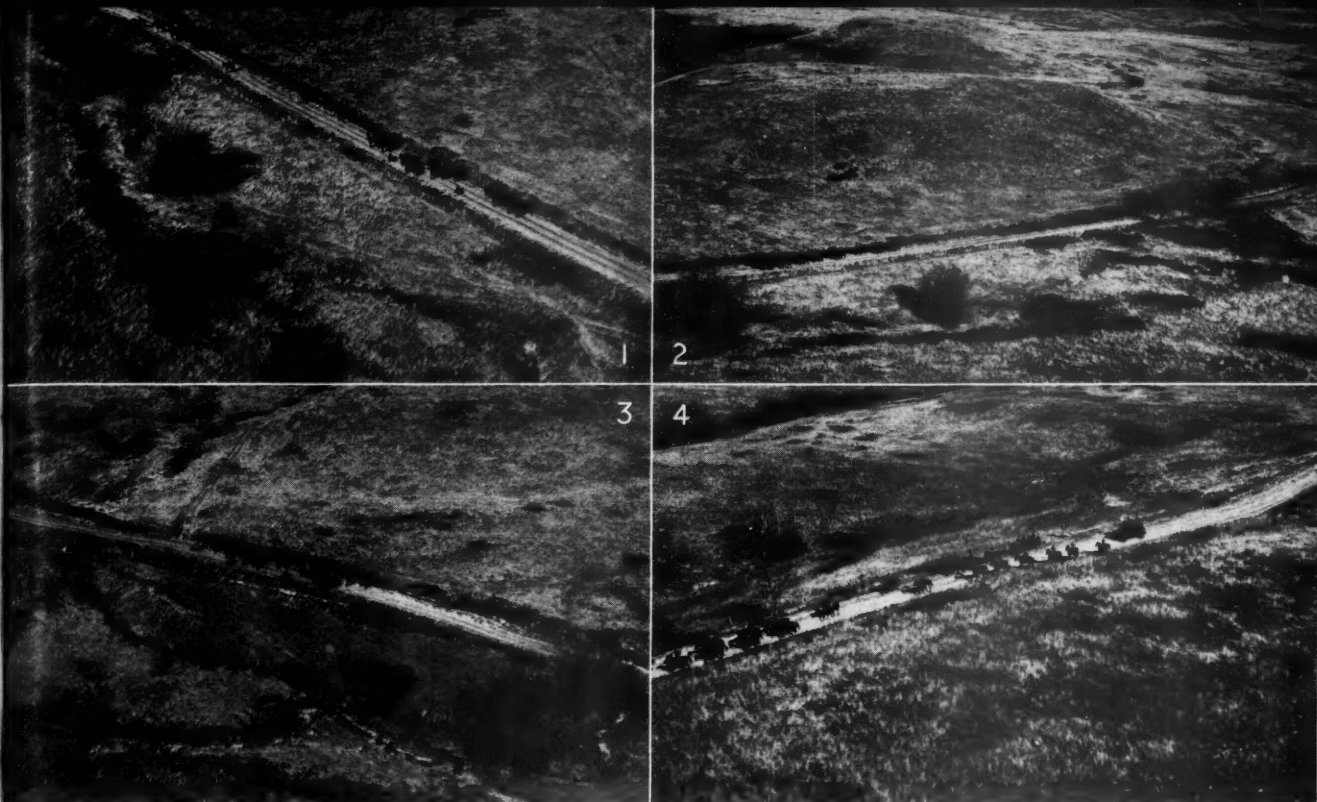
Due to the ever increasing radius of effective burst the dispersion must be as wide as possible. It must be rapid and we should use our mobility. Every advantage of cover must be taken. If no cover is available our men should be taught to use their horses for cover or flatten themselves on the ground. It goes without saying that, when hostile aviation is active and where the ground permits, units should march in as much of a dispersed formation as possible and still maintain control. Every platoon, troop, squadron and regiment should have a rapid method of wide dispersion (by echelon, staggered, etc.), to be used where space permits and ample warning of the attack is received. Where time and space does not permit, the emergency methods we are considering will have to be used.

When forced to march on fenced-in roads we should have plenty of distance between platoons. The method of marching taught at the Cavalry School is believed to be ideal for this purpose. Distance between platoons at the walk, however, should also be maintained at the halt. The terrain over which the march is to be made should be considered. When time and space factors and the mission permit hilly country with defiles should be avoided at the expense of a slightly longer march. Night marches, of course, should be made whenever practicable.

After our passive measures of defense we should consider our aggressive measures. Our best chance to hit these air borne harbingers of death, unless we receive ample warning of their approach, is when they have completed their attack and are making their escape. They are flying directly away. We can aim directly at them and we are not under fire. Therefore fire should only be given early or late in the attack unless we are under cover and not in the act of seeking it at the time of their attack.

There is something, however, which comes before dispersion or fire—*Alarm!*

A definite, sure, quick alarm must be given. Air scouts should be well out to the flanks, front and rear, observing in all four directions. Rockets, radio, etc., can be used by distant security agencies and visual signals by our close in air and mechanization scouts. Arm signals for hostile air or mechanized attack are given in the new



1—Troop caught between two barbed wire fences by an air attack. 2—Good targets—if surprised or caught between two barbed wire fences as in this case. 3—LMG platoon in action vs. air attack; not enough dispersion. (Side road not taken advantage of.) 4—Pistol fire vs. air attack; dispersion poor.

Cavalry Field Manual. The air signal gives the direction of the attack the mechanization signal does not. It is believed that in the "hostile mechanization" signal after the arm is waved through an arc the direction of the approaching vehicles should be given. The two signals would be clearer and less liable to be confused if the hat were waved through a *vertical* arc for aircraft and through a *horizontal* arc for mechanization and then the arm pointed towards the direction from which the attack was coming.

A more important essential is missing from both signals. The signal should be audible as well as visible. An air scout on a nearby hill could wave his hat for ten minutes and a tired command marching along a dusty road on a hot day would probably prefer to believe that "Private That-air-scout" was fanning himself or keeping off the flies if they did, by chance, happen to glance in his direction.

On a recent march I tried giving the air signal both with and without the whistle. Even though I augmented the latter with a few yells at the top of my voice the whistle was the only thing that got immediate results. Our air scouts must make a noise and a big one. If they are not tobacco auctioneers or opera singers they will need some help beside their lungs. Mess or recall would be sure to attract immediate attention but it would be hard to equip all our air scouts with bugles. I believe both signals should be accompanied by sharp blasts from a special distinctive whistle or, at least, the loudest one available.

We now have our sequence; *Alarm—Disperse and Take Cover—Fire (early or late)*. Of which dispersion

is the most important due to high angle fire and bombs.

Our main mistakes, in my opinion, have been: First—that we have tried to return fire first or at the same time as we were deploying and taking cover (we must choose which of these is the most important to our safety as both cannot always be accomplished); Second—our dispersion and taking cover has been slow and feeble; Third—our signals have been unsatisfactory.

From the above discussion we have determined what we want to do and when we want to do it. It is now time to consider the methods of accomplishing our desires in detail.

Our main problem is the command caught in close formation with little space in which to deploy and little cover available. This will usually be a command marching on a road with fences on either side. As to cover, in this case, we can only flatten ourselves in ditches or on the ground. The command already in an open formation will have little to fear as it presents a poor target and can more easily take cover and deliver an effective fire.

The first method of defense used by troops at the Cavalry School was for the odd numbers to immediately dismount and meet the attack by rifle fire. The even numbers made a feeble attempt to disperse and seek cover—mainly for the horses. Little thought was given by any of us for the safety of the men if they failed to bring down their target. Is it not probable that the suicide flyers of today will be able to get off their bombs, even though fatally hit, or that the plane and bombs will kill some of our men and horses when they crash?

After several experiments conducted with a troop on the march I am of the opinion that it is better to dismount the even, instead of the odd, numbers. All the officers and enlisted men on the test agreed with this conclusion. If the odd numbers dismount on the near side (assuming the command is marching in column of twos) they are pocketed between two horses and must move to the rear to fire. If the even numbers dismount they are clear and ready to fire. One argument in favor of the odd numbers was that it placed the squad leader and second-in-command (numbers one) on the ground where they could direct the fire but if the command disperses properly it will be largely individual fire and it is believed that speed is the prime requisite. In either case horseholders should grab the reins of the men opposite them as the latter dismount to fire.

Another method used by school troops was that if the attack was from the right of the column odd numbers first withdrew their rifles from the gun boots and then dismounted on the off side ready to fire. If the attack was from the left, front or rear even numbers dismounted and fired.

From the above solutions it is evident that little dispersion was contemplated. If we are going to use our mobility, it seems to me, we should first disperse mounted (as much as possible) by pairs alternately to the right and left seeking cover if available. Then, and only then, should we attempt to fire. Pairs containing numbers one and two can be instructed to break to the left and the other pairs to the right.

Dismounting on the side from which the attack is coming so as to have freedom of fire in that direction is contradictory to our assumption that the best time to fire in a surprise attack is after the planes have passed overhead. It also complicates the action; especially if the attack hits us at an angle in which there might be a question whether to dismount right or left. If we disperse first it

matters little whether we dismount right or left. However, it is important that our methods be fast and simple.

Therefore, I believe, that after dispersion the even numbers should always fire.

If warning is not given in time fire can be placed on hostile aviation from the saddle by rifle or on low flying planes by the pistol. These methods should only be used in case of last resort and men should disperse individually as much as possible. It is believed pistol fire will be exceptional and ineffective due to the height of the planes and the fact that they will present the best target after delivering their attack and thus be at too great a range for pistol fire.

During last year's Fourth Army Maneuvers cavalry columns were greatly delayed by continual harassment from a few planes. In this case, where a command must maintain a fixed rate of march to arrive at a certain destination on time and the march cannot be made at night, we may have to resort to fire from the saddle to save time.

Light machine gun units should disperse alternately to the right and left by half squads and then go into action if time permits. When hostile air attack is expected all machine guns should be leap-frogged forward, some guns being constantly on the ground protecting the column.

In extreme cases scout or armored cars, deployed in depth throughout the column, could be employed if available.

Antiaircraft defense should, of course, be coordinated with anti-tank and anti-chemical defense. Methods to be used should be indicated by the given signal which should show the kind of attack and the direction.

There are still many theories on antiaircraft defensive methods to be worked out in practice or combat but it is believed that the important essentials and their sequence are:

1. *ALARM* 2. *DISPERSION AND COVER* 3. *FIRE*
(*Early if dispersed and late ALWAYS*).

AND, AS I HAVE BEEN a journalist as well as a soldier, to be quite frank, I believe very little in what is to be gathered from newspapers and so accept whatever I read with the utmost caution.—MAJOR GENERAL J. F. C. FULLER.

The 1938 Cavalry Rifle and Pistol Team

By FIRST LIEUTENANT F. CLAY BRIDGEWATER, 2d Cavalry

Every regular regiment of Cavalry in the United States is now represented by the seventy-nine competitors who assembled at Camp Perry, Ohio, about May 23d, for this year's rifle and pistol tryouts. From this squad of officers and enlisted men will later be chosen a rifle and pistol team to represent the Cavalry in the National Matches in September. These National Matches are attended annually by several thousand competitors, about ten per cent of whom are from the Army, the Marine Corps and the Coast Guard. The purpose, therefore, in our summer training at Perry is to develop a winning cavalry team and capable cavalry individual competitors for the National Matches.

With this in view the squad has followed a vigorous schedule of practice and record shooting over the National Match Courses supplemented by outside competition shooting. Members of the squad participated in the Ohio State Rifle Matches which were held at Camp Perry on June 25th, and in the Indiana State Rifle and Pistol Matches which were held at Frankfort, Indiana, on July 15th. Both of these matches were small but interesting, and they were excellent practice for the new men. The annual Chief of Cavalry Matches, which were also fired in conjunction with the training and team tryouts, were started on July 7th. Plans are now being made for eligible members to go to Wakefield, Massachusetts, to participate in the United Services of New England Tournament.

Those men who were required by regulations to fire the new Course "A" for record qualification found little difficulty in turning in excellent scores on June 30th. Twenty-four fired over the course, all making expert scores of 232 and better. Sergeant J. W. Kitterman was high with 247 nosing out Sergeant Jens B. Jensen who shot a 246.

The regulation Course "A" is quite different, however, from the National Match Course. Let us briefly review the latter.

The complete National Match Course for the rifle is as follows:

1. 200 yds.—Off-hand—slow fire—10 rounds—no sling permitted—time 10 minutes—Target "A"—10" Bull's-eye.
2. 200 yds.—Standing to sitting—rapid fire—10 rounds—time, 1 minute—Target "A"—10" Bull's-eye.
3. 300 yds.—Standing to prone—rapid fire—10 rounds—time, 1 minute, 10 seconds—Target "A"—10" Bull's-eye.
4. 600 yds.—Prone slow fire—10 rounds—time, 10 minutes—Target "B"—20" Bull's-eye.
5. 1,000 yds.—Prone slow fire—20 rounds—time, 30 minutes—Target "C"—36" Bull's-eye.

The digging of support holes on the firing line for heels

and elbows is not permitted. Possible score over course is 300.

The complete course for the pistol is as follows:

1. 50 yds.—Slow fire—10 rounds—time, 10 minutes—Standard American target with an approximate 3½" Bull's-eye.
2. 25 yds.—Timed fire—two 5 round strings of 20 seconds each—Target, Standard American.
3. 25 yds.—Rapid fire—two 5 round strings of 10 seconds each—Target, Standard American.

It is interesting to note that, over the National Match Courses, longer ranges are fired and smaller targets are used than over the courses prescribed by Army Regulations for troops.

On June 25th our entries in the Military Classes of the Ohio State Rifle Matches, held at Camp Perry, placed as follows:

Match No. 1 (200 yds. Standing S.F.):

Second place: Sgt. J. P. Wood, Hdqrs. Tr., 7th Cav. Score 46; Silver medal.

Third place: 1st Lt. C. F. Harrison, 5th Cav. Score 46; Bronze medal.

Fourth place: 1st Lt. A. A. Matyas, 2d Cav. Score 46.

Ninth place: Sgt. J. W. Kitterman, Hdqrs. Tr., 14th Cav. Score 46.

Match No. 2 (200 yds. R.F. and 300 yds. R.F.):

Seventh place: Corp. H. P. Watson, Tr. A, 13th Cav. Score 96.

Eighth place: Sgt. O. F. Howard, Tr. F, 6th Cav. Score 96.

Tenth place: Tech. Sgt. Ben Schwartz, Hdqrs. Tr., 7th Cav. Score 95.

Match No. 3 (600 yds. S.F.):

First Place: Sgt. C. J. Leach, Tr. F, 8th Cav. Score 50.

Seventh place: 2d Lt. W. R. Prince, 6th Cav. Score 49.

Tenth place: Sgt. W. G. Betts, Tr. B, 13th Cav. Score 48.

Match No. 4 (highest aggregate of above ranges):

Fourth place: Corp. H. P. Watson, Tr. A, 13th Cav. Score 189.

Seventh place: 2d Lt. W. R. Prince, 6th Cav. Score 188.

Eighth place: Pfc. H. W. Tusten, Tr. A, 13th Cav. Score 188.

Ninth place: Sgt. A. F. Kellerman, Tr. A, 1st Cav. Score 188.

The Chief of Cavalry Matches which were started July 7th and completed July 19th were very closely contested. They included individual as well as team competition for both the rifle and pistol. Every competitor on the squad



U.S. Cavalry Rifle Team NATIONAL MATCHES, CARR

Front Row—Left to Right: Second Lieutenant Streeter; First Lieutenant Johnson; First Lieutenant Stevenson; Captain Finnegan; First Lieutenant Harrison; Captain Palmer; First Lieutenant Markle; First Lieutenant Harper; First Lieutenant Bridgewater; First Lieutenant Matyas; Second Lieutenant Prince.

Second Row: Corporal Hazel; Corporal King; Sergeant Yeszerski; Private First Class DeMello; Sergeant Wood; Sergeant McCormick; Sergeant Christensen; Sergeant Young; Private Rowland; Corporal Olender; Corporal Field; Corporal Bartnikaitis; Corporal Massie; Private First Class Skonieczny; Sergeant Uglum; Sergeant Leach;

Private First Class Tusten; Sergeant Blazejevski.

Third Row: Sergeant Miller (standing); Corporal Watson; Sergeant J. E. Gentry; Corporal Prescott; Corporal Lillemoen; Private First Class Shepard; Corporal Hutson; Corporal Matthews; Corporal Liljegren; Staff Sergeant Jensen; Sergeant Lindsey; Captain Martin (Team Coach); Captain Phillips (Team Captain); Captain Cameron (Adjutant); Sergeant Nash; Sergeant Gayne; Sergeant Shantz; Sergeant Foster; Private First Class Roth; Technical Sergeant Schwartz; Sergeant Kaminski; Sergeant Reynolds; Sergeant J. A. Gentry (standing).

entered all the individual matches and each regiment except the 10th Cavalry was represented in the team matches. In the latter matches the scores were very close showing keen regimental competitive spirit.

The Team is very grateful to Brigadier General Guy V. Henry who this year presented us with an unusually large and impressive trophy for pistol competition. It was competed for the first time this year and won by Sergeant P. J. Mattson, Headquarters Troop, 12th Cavalry.

The results of the Chief of Cavalry Matches are as follows:

INDIVIDUAL OFF-HAND MATCH

Fired by all competitors.

Course—20 shots at 200 yards.

1. Shantz, V., Sgt., B 11th. Score 95.
Cavalry School Trophy and Gold Medal.
2. Bartnikaitis, F., Corp., Hdqrs.-2d. Score 93.
Silver Medal.
3. Leach, C. J., Sgt., F-8th. Score 93.
Bronze Medal.

INDIVIDUAL RAPID FIRE CHAMPIONSHIP MATCH

Course—Two scores each at 200 and 300 yds., rapid



Fourth Row: Sergeant Knowles; Private First Class Collins; Corporal Kloss; Corporal Gorski; Sergeant Kellerman; Corporal Davis; Sergeant Szobota; Corporal Wlasenko; Sergeant Morgan; Sergeant Grider; Sergeant Betts; Sergeant Black; Private First Class Caudill; Sergeant Ernst; Corporal Green; Sergeant Mattson; Corporal Stickel; Corporal Morrison; Sergeant Howard; Corporal Kotarski; Staff Sergeant Such; Sergeant Hamel; Sergeant Frace.

Fifth Row: Corporal Jones; Sergeant Kitterman; Sergeant Milton; Private First Class Magill; Private Terry;

Private Meneley; Private Caldwell; Private Davis; Private Wooldridge; Private Ward; Private Sizemore; Private Sparks; Sergeant Towers; Sergeant Abel; First Sergeant Holz; Sergeant McCloud.

Back Row: Private Grant; Private First Class Young; Private Vincent; Private Nottingham; Private Hicks; Private Pack; Private Moore; Private Embry; Private Brand; Private Veihl; Private Music; Private Fritts; Private Bartos; Private Mullins; Private Renfrow; Private Lalasz; Private Callahan; Private Johnson; Private First Class Hard; Private Stanley; Corporal Pinson.

fire, service rifle, Target "A."

All members participated.

1. Rowland, H. B., Pvt., F-8th. Score 194. Trophy and Gold Medal.
2. Milton, O. D., Sgt., E-8th. Score 193. Silver Medal.
3. Howard, O. F., Sgt., F-6th. Score 193. Bronze Medal.

CAVALRY INDIVIDUAL TROPHY MATCH

Course—Once over National Match Rifle Course, with the service rifle.

All members participated.

1. Foster, P., Sgt., MG-11th. Score 283. The Trophy and Gold Medal.
2. Grider, R. R., Sgt., F-14th. Score 283. Silver Medal.
3. Caudill, J. C., Pfc., E-8th. Score 281. Bronze Medal.

FORT BLISS TROPHY MATCH

Course—20 shots at 1,000 yds. with service rifle. All members participated.

1. Tusten, H. W., Pfc., A-13th. Score 97.

Trophy and Gold Medal.

2. Wood, J. P., Sgt., Hdqrs.-7th. Score 97.
Silver Medal.
3. Watson, H. P., Corp., A-13th. Score 97.
Bronze Medal.

KROMER-HOLBROOK TROPHY MATCH

Course—Three times over the National Match Rifle Course with the service rifle. The Holbrook Trophy is awarded to the "new shot" having the highest aggregate score. A "new shot" is an individual who has never been a firing member in the National Rifle Team Match.

All members participated.

1. Kellerman, A. F., Sgt., A-1st. Score 850.
The Kromer Trophy and Gold Medal.
2. Milton, O. D., Sgt., E-8th. Score 843.
The Holbrook Trophy and Gold Medal.
Silver Medal.
3. Watson, H. P., Corp., A-13th. Score 838.
Bronze Medal.

REGIMENTAL TEAM MATCH

Course—Once over National Match Course.

Conditions—Teams of four firing members from each regiment. Total aggregate scores to count.

1. 11th Cavalry Team—Trophy and Gold Medals.

Sgt. V. Shantz	279
Sgt. A. G. Gayne	283
Sgt. P. Foster	278
Sgt. J. V. Nash	285

Total1,125

2. 8th Cavalry Team—Silver Medals.

Sgt. O. D. Milton	278
Sgt. C. J. Leach	277
Sgt. H. Young	282
Pfc. J. C. Caudill	276

Total1,113

The remaining regimental teams placed in the following order: 3d Cavalry—1,111; 2d Cavalry No. 2—1,111; 7th Cavalry—1,108; 2d Cavalry No. 1—1,108; 13th Cavalry—1,107; 6th Cavalry—1,098; 14th Cavalry—1,094; 4th Cavalry—1,094; 12th Cavalry—1,089; 5th Cavalry—1,079; 1st Cavalry—1,067; 14th Cavalry No. 2—1,038.

The results of the Chief of Cavalry Pistol Matches were as follows:

KROMER-GUY V. HENRY PISTOL TROPHY MATCH

Course—Three times over the National Match Pistol Course with service pistol. The Guy V. Henry Trophy to the "new shot" making the highest aggregate score over this course.

1. Jensen, J. B., S/Sgt., Cav. School Det. Score 798.
Kromer Trophy and Gold Medal.
2. Palmer, R., Capt., 10th Cav. Score 784.
Silver Medal.

3. Christensen, H., Sgt., A-1st AC Sq. Score 762.
Bronze Medal.

* * *

7. Mattson, P. J., Sgt., Hdqrs.-12th. Score 751.
Guy V. Henry Trophy and Gold Medal.

REGIMENTAL PISTOL TEAM MATCH

Course—Once over National Match Course. One team of 2 competitors each; total aggregate scores to count.

1. 14th Cavalry Team—Trophy and Gold Medals.

Sgt. R. R. Grider	271
Pfc. B. J. Skonieczny	234

Total505

2. 13th Cavalry Team—Silver Medals.

Sgt. W. G. Betts	244
Corp. H. P. Watson	260

Total504

Each regiment except the 10th Cavalry was represented. Nineteen teams competed and finished in the following order: 14th Cav.; 13th Cav.; 3d Cav. No. 2; 2d Cav. No. 2; 12th Cav.; 9th Cav.; 11th Cav.; 1st Cav.; 5th Cav. No. 1; 6th Cav.; 7th Cav. No. 2; 14th Cav. No. 2; 7th Cav. No. 1; 5th Cav. No. 2; 2d Cav. No. 1; 8th Cav. No. 1; 4th Cav. No. 1; 3d Cav. No. 2; 4th Cav. No. 2.

The results of the Indiana State Pistol Matches were not officially announced in time for this publication. Our entries in the Indiana State Rifle Matches placed as follows:

Match No. 1

Course—20 shots at 200 yards, off-hand.

1. Watson, H. P., Corp., A-13th. Score 97.
Gold Medal.
2. Mattson, P. J., Sgt., Hdqrs.-12th. Score 96.
Silver Medal.

Match No. 2

Course—One score at 200 yards R.F.

3. Foster, P., Sgt., MG-11th. Score 50.
Bronze Medal.

Match No. 3

Course—One score at 300 yards R.F.

2. Shantz, V., Sgt., B-11th. Score 50.
Silver Medal.

Match No. 4

Course—10 record shots at 600 yards S.F.

1. Tusten, H. W., Pfc., A-13th. Score 50.
Gold Medal.

In these Indiana Matches our entries competed against members of the Infantry Team, National Guardsmen, and civilians, all of whom made a field of about 150 contestants. The Cavalry won two of the four rifle matches in which we were able to compete and tied for first place in the other two. The first time over the course in Match No. 2 Lieutenant Stevenson and Sergeant Howard tied with Sergeant Foster and others for first place with a possible score. The conditions of Match No. 4 required a

contestant who made a possible score to continue shooting until making a 4. Pfc. Tusten, 13th Cavalry, who won that match shot nineteen 5's. Corporal Watson of the 13th Cavalry, winning three medals, was the outstanding cavalry competitor.

The competition shooting of the past two months has naturally done much toward developing material for our teams. However, a great amount of stress has been placed on the basic principles of rifle and pistol marksmanship and the physical condition of the competitor. A man cannot shoot unless he is physically fit, and coordinated, and unless he has excellent vision. Regardless of his ability as

a shooter, constant "dry shooting," position exercises, and trigger and sighting exercises are all as necessary a part of his training as is his daily firing on the range.

As a result of this intensive work our new shots are coming along in such good shape that most of the old shots who returned this year find it difficult to equal their pace. Since Sergeant Milton and Sergeant Grider are the only old members of the Pistol team present there is still much competition to replace the vacancies. Thus far our chances in both the National Matches look very promising. Naturally the Cavalry is anticipating a successful year.



THE NATIONAL GUARD

What it requires from the soldier—The discipline of the National Guard conforms to the system prescribed for the Regular Army and the training is such as to insure the maintenance of that discipline. The soldier is required to attend one drill each week and field training for fifteen days out of each year. He is occasionally expected to turn out one additional night or for a week-end at target practice. He is required to obey strictly and to execute promptly the lawful orders of the noncommissioned officers and commissioned officers senior to him. He is required to comply with the articles of War for the Army of the United States which provide punishment for desertion, disobedience, fraudulent enlistment, absence without leave, disrespect to or assaulting his superior noncommissioned or commissioned officer. In addition he obeys all the laws applying to the civil population.

What it does for the soldier—The soldier receives his uniform and equipment without charge; he is paid a minimum of \$1.00 for each armory drill up to forty-eight drills for the year and for each of the fifteen days in field training or active service of the state, he receives a minimum of \$1.50 in addition to food, quarters, and necessary transportation. If called or ordered into Federal service his pay

will be the same as for the Regular Army. If he adapts himself readily and applies his intelligence he will improve his prospect of promotion. Each year a number of enlisted men are detailed with their own consent for active duty with the Regular Army to attend Special Service Schools where they receive instruction on military subjects. Nearly all of the officers of the Pennsylvania National Guard started their military careers as enlisted men and earned promotions in fair competition. If the soldier is young enough he is eligible to enter a competitive mental examination for appointment to the United States Military Academy at West Point. If he is injured at armory drill or field training camp his bills and compensation are paid by the State or Federal Governments. The soldier receives periodical physical examinations and his military training improves his physical condition. He is taught how to walk, shoot, and think straight. He is trained to respect authority and when placed in a position of responsibility he is taught to administer authority with due observance for the rights of others. Military training will give him a standing of a man unafraid among men.—*From instructions published by the Pennsylvania National Guard.*

LESSONS FOR TODAY

From Indian Campaigns of Yesterday

By Brigadier General H. S. Hawkins, Retired

Certain principles of war are immutable. Even though we have today many new weapons that cause alterations in tactical formations and methods, there are yet many examples of past tactical successes or mistakes that are as instructive now as they were at the time they were enacted.

We might look back upon some of our Indian campaigns and find not only historical interest but also lessons that are still of value. A few of these lessons are the subject of this paper.

Indian warfare was not very similar to the warfare of modern times. But, even today, a cavalry regiment, in performing its many rôles, may find itself often in situations where these principles are as important as they ever were. An examination of the book "Cavalry Combat," recently published by the Cavalry Association, shows how many comparatively small combats cavalry is likely to have in modern warfare.

It has always appeared that one of the greatest temptations to the amateur tactician is the separation of force or the division of a command into separate detachments for the purpose of attacking the enemy in front and on the flank or rear at the same time. It does not require any knowledge or experience or skill for an officer to conceive of such plans, although it requires much to carry them out. Such ideas occur to every commander whether he be experienced and skillful or ignorant and awkward in the handling of his command. To the tyro, such movements appear to be brilliant, but to the well trained and experienced officer they are fraught with danger and difficulty.

Of course, such plans have met with occasional success. But it has been due to sheer luck rather than brilliance, unless the correct principles have been adhered to. We always seek to envelope the enemy if it appears practicable. An envelopment does not mean separation of force. In an envelopment, the various sub-divisions of the command should never be beyond supporting distance of each other or beyond the control of the force commander. If the sub-divisions get out of hand and out of sight of each other, and so far separated that they cannot support each other immediately, the movement becomes what is generally known as dispersion. Unless each sub-division is by itself capable of resisting successfully the attack of the entire enemy force, such dispersion is exceedingly dangerous.

To justify such an attack we should have great superiority of force, the ground to be traversed by each sub-division has to be well known, the location of enemy flanks carefully ascertained, and the coördination well arranged. In order to effect surprise these requirements are sometimes neglected. And this desire for surprise and the attempt to surround the enemy so that he could not escape are what led some of our commanders in Indian warfare to failure or disaster.

The most notable of these disasters is, of course, Custer's Last Fight, or the Battle of the Little Big Horn River on June 25, 1876. This river, a branch of the Big Horn River, flows north on its way toward the Yellowstone. The river is little more than a creek, fordable everywhere. On its eastern side it is bordered by high and precipitous bluffs. On the western side the banks of the river are low and the little valley widens out from a few hundred yards to about a mile before it is flanked by very low and rolling hills. Several tribes of Sioux Indians were camped in this valley sheltered by the high bluffs from observation from the east. It is not intended to give a detailed description of this campaign, or of Custer's reasons for attacking this camp. It is sufficient to say that Colonel Gibbon's command, consisting of a battalion of the 7th Infantry and two troops of the 2d Cavalry, had been sent by General Terry, from a rendezvous on the Yellowstone River, to march west up the Yellowstone to the mouth of the Big Horn, and then south up the valley of the Little Big Horn River to find and attack the Indians who were believed to be there. Custer, with twelve troops of the 7th Cavalry, had been sent south from the Yellowstone to proceed some distance and then turn west at some point about twenty or thirty miles east of the Little Big Horn. He was to march westward to reach some point south of the Indian camp, and then to attempt to inclose the Indians between his column and that of Gibbon. Each of the columns started on June 22nd. They were supposed to meet in the valley of the Little Big Horn on June 26th. So, here was a separation of force at the very beginning of the campaign. It could not have succeeded. Custer arrived at the valley on June 25th, and Gibbon did not reach the scene of action until June 27th. On June 25th, from a point about twenty miles to the east of the valley, Custer marched westward. His Indian scouts told him the Indians were in the valley in

great numbers. For some reason he did not believe them. But he divided his regiment into three squadrons at a point some fifteen miles away from the valley. One of these groups, consisting of three troops under Captain Benteen, was sent toward the valley to the southwest to explore that region and with very indefinite orders. He became separated quickly from the rest of the command by at least five or six miles. The other groups remained together until they were close to the valley. A Sioux scouting party of about sixty Indians disclosed themselves in Custer's front and fell back toward the camp, thus indicating its position. Custer then sent Major Reno with three troops to cross the river and move north, down the valley, to the attack. He told Reno he would support him with the whole outfit. Custer then struck off with five troops to the north. Apparently, he remained on the bluffs east of the river until he had gone some three miles to the north. Evidently he intended to attack the Indians on their eastern flank and rear in conjunction with Reno's attack from the south, but the steep bluffs along the edge of the river did not offer a convenient crossing, and he kept on moving north in the hope of finding a better place to cross with his troops in attack formation. Then, close to the river, and still on the eastern side, he was attacked and completely destroyed by hordes of Indians under Chiefs Gall and Crazy Horse. He had dismounted to fight on foot in the face of unknown numbers of the enemy.

In the meantime, Reno had crossed the river about two miles south of the Indian camp, and ridden north to the attack. He was met by swarms of Indians and forced to dismount and fight a defensive action near the river. He was outflanked and forced back until he remounted his command and retreated south and then east across the river to the high bluffs. He was pursued by hundreds of Indians and his retreat became a rout. He lost about a third of his men. But on reaching the bluffs he halted and turned at bay to face the frenzied Sioux. The scenes during that retreat would be worth the telling if we had more space for that purpose. His ammunition was low, and the pack train with one troop as escort was still several miles to the east. His situation was critical. But just at this moment, Benteen, who with his three troops had been exploring to the southwest and who had wisely turned north to rejoin the regiment, was marching along the bluffs looking for the trail of the other troops. Quite providentially he saw the remnant of Reno's command a few minutes after it had halted for its last stand, and joined it in time to make a stand against the furious attack. Later, the pack train and its one troop escort, guided by an officer sent by Reno for the purpose, rejoined the command. The Indians left a force to contain Reno and Benteen and, apparently just at this time, concentrated all their force against the unfortunate Custer with the result that has been told. Reno and Benteen remained in this position besieged by the Sioux until the 27th, when the Indians, hearing of the approach of Gibbon's column from the north, left the valley and made off towards the Big Horn mountains in the west.

Custer's fate was not known until Gibbon's column arrived.

Now, when Custer separated his command in preparation for this fight he did not know the exact location of the Indian camp, he did not know the ground over which his columns had to move, he did not know the numerical strength of the Indians, and he had not arranged any means of communication between the separated columns. His tactics were inexcusable, but quite characteristic of the man. Always before, he had been lucky. He was impetuous and gallant, but inclined to leave everything to chance in order to effect surprise and prevent escape.

Custer had won a notable victory over the Cheyenne Indians encamped on the Washita River in Oklahoma in 1868. For this fight, he divided his force into four groups and sent one around to the right and one around to the left to effect a double envelopment. But he did not know the ground or the strength of the enemy. He was lucky. He struck by surprise the north and western end of a camp extending along the river for some ten or twelve miles, and containing in all many hundreds of warriors of different tribes. The Cheyenne Indians under Black Kettle occupied the western end of this far extended camp. Custer surprised and defeated them and destroyed their camp. But then, he became aware that more Indians in great numbers down the river were threatening him. And he left hastily to rejoin his wagons, leaving Major Elliott and nineteen troopers, who thought they were enveloping the Indians' eastern flank, to be slaughtered by the Indians who were approaching from the east. Thus, this attack though successful was costly. And he had a narrow escape from disaster.

In the early spring of 1876, in what is known as the Powder River expedition in Wyoming and southern Montana, Colonel Reynolds with about six troops from the 2nd and 3rd Cavalry regiment, detached from General Crook's command, rode all night in bitterly cold weather to attack the Sioux camp under the famous Chieftain Crazy Horse. Arrived near the camp he separated his force, sending several troops around to one flank. These troops became lost in the dim light of early dawn and in the snow and ice, and failed to cooperate with the central attack. The result was that Crazy Horse, though surprised and beaten at first, was able to withdraw his warriors in good order and to come back and recapture the pony herd that had been captured by the soldiers. The camp was destroyed but the troops were pursued and harassed by the Indians and suffered considerable loss and great hardships in the terrible weather before they rejoined General Crook. Some of the officers were tried by courtmartial afterwards for failing to cooperate in the fight, but it is clearly apparent that the failure of complete success was due to this often fatal desire to attack on front and flanks without knowing the ground or the force of the enemy.

It is true that in order to effect surprise, the troops had to attack quite often without this information. But in such case the only thing to do is to attack with closely supporting columns deployed in some depth so that the rear

echelons might incline to the right or left as the situation is developed. Such an attack is not only safer, but is also much more powerful and generally much more effective, because of the control that is possible, than these widely spread envelopments, even though the latter may sometimes be successful.

General Mackensie, commanding the 4th Cavalry, was the most successful Indian fighter of those days. He always refused the temptation to divide his force. This was the outstanding difference between him and many of the others. He never had a disaster or a real failure even though he was obliged often to attack without knowing the enemy strength accurately and without time to explore the ground thoroughly. By keeping his whole force in hand he was able to meet unforeseen situations with all the strength of his command.

To attack by surprise, an isolated regiment of cavalry should be divided into three groups. The point on which to attack and the ground to be traversed should be carefully, even though quickly, selected. The leading group should be launched into the attack over the ground selected for the purpose and directly against the point of attack. The second group should be echeloned upon the first group, to the right or left, or follow directly in rear if the front of the attack is to be very narrow. The third group should follow the first two at supporting distance and be held as a reserve until its use to follow through or to attack on the right or left is clearly indicated.

In these days, our regiments are organized with powerful machine gun support. We try to use the machine guns by placing them first of all in a fire position from which they can fire with effect upon the enemy. And then we send the rifle units at some distance on the right or left of the machine guns to attack much as described above. But, to attack by surprise, it may be impossible to get our machine guns into position with a clear field of fire without alarming the enemy and disclosing our presence before our riflemen can launch their assault. If the ground and other circumstances are such that we can come to close quarters with the enemy without the support of the machine guns, then it is certainly foolish to try to use them. The primary use of machine guns is to enable the riflemen to reach the enemy. If we do not need them for this purpose, then, to use them would merely give the enemy that much more time to prepare for our assault. Of course, if our riflemen are not numerous enough to mix with the enemy and do him in, then we can attack only by fire at a safe distance. In that case, or if we are not sure of the strength of the enemy, we had better use our machine guns first and develop his resistance before we commit our riflemen to the assault. This would be so in case of an harassing attack.

In Indian warfare, when the Indians were usually encamped in narrow and crooked valleys, it would have been ordinarily impossible to get machine guns close enough for a clear field of fire without warning the Indians of the impending attack, thus giving them time to escape before the rush of the riflemen. But the machine guns

could have been used as strong points of support behind which the troops might rally in case they were unsuccessful in their assault. This, of course, presupposes that they could, in any given case, be certain that the assaulting troops would be able to rejoin the machine guns. Of course, machine guns could have been used in defense or to repel counter attack. In some cases they could have been used in attack. If Custer had had our modern equipment of machine guns, and had kept his regiment in hand in the battle on the Little Big Horn, he might have attacked in the following way:

As described before, the valley in which the Sioux were camped ran north. It was flanked on its eastern side by high and precipitous bluffs. At the foot of the bluffs ran the little river in tortuous windings and bendings. On the western side of the valley were low and rolling hills easily traversed by mounted troops. The floor of the valley west of the river varied in width from about five hundred yards to more than a mile.

Custer, approaching from the east, might have crossed the river where Reno's squadron crossed it, about two miles south of the Indian camp. Then, turning north and following the bed of the valley with the river on his right, he might have sent one squadron of four troops straight to the attack, deployed as foragers in line of troop columns of platoons, as we do now for mounted attacks. In the meantime he might have sent his machine gun unit to the low hills on the western side with instructions to move north in those hills until it had good targets to fire upon. The second squadron might have been echeloned to the left of the leading squadron. The third squadron, less one troop detached to escort the pack train, might have followed in reserve at two or three hundred yards distance.

This movement would have threatened the Indians' avenue of escape toward the west and penned them with their backs against the eastern bluffs. The mounted pistol attack, with so many echelons in depth, would undoubtedly have swept through the entire Indian camp.

In the actual event, as it was enacted, the Indians were warned of Custer's approach only a short time before Reno's squadron attacked down the valley. They had made no preparations to move the camp. They were really surprised by the rapidity of his movements. His whole regiment could have moved in the same time in rear of Reno's squadron.

If our machine guns had been present, they could have brought supporting fire from their positions on the western hills and could have prevented any escape to the west. The Indians, if defeated, would have been driven to the north from which direction Colonel Gibbon's column was marching to cooperate with Custer. But, speaking of machine guns, it is dangerous to put them down on the ground if we do not know the strength of the enemy. We may find him in such strength that, even though we attack mounted, we cannot get back to our grounded machine guns. Thus, we may become permanently separated from them and disaster may follow. Therefore, we must make the decision at the outset as to whether to use the

guns or to keep them in pack and have them follow the mounted attack, perhaps to be used later. If it is a break through that we are attempting, this latter course would be wise. But if we are determined to remain on the field and fight to a finish, the former course would strengthen our attack. In uncertainties like these, a better way is to use the machine guns first and move upon the enemy afterwards, with the machine guns following closely. A better way for Custer was not to attack at all.

It may be doubted if the 7th Cavalry would have been victorious over the Indians, even had our plan been adopted. The Indian warriors outnumbered Custer's entire regiment by a proportion of six or eight to one. However, such an attack might have so paralyzed the Indian's faculties for the time being that Custer could have withdrawn and defended himself against any counter attacks with a very good chance of success. By sweeping through the camp and then continuing to the north he would very soon have been joined by Gibbon's column. But, again, the machine guns might have been lost if left in position on the western side of the valley. Against Indians, they probably could have defended themselves until rescued by the combined forces of Custer and Gibbon. Nevertheless, it would have been safer to take them in the attack with and in rear of the rifle units and use them later to help defend the command.

There is no question that if he attacked at all, it should have been with a united command. Even if the command had been held united, to have dismounted to attack on foot would have been very unwise. The command was isolated. It would have been anchored to the ground, whereas the Indians were very mobile. The Indians could have enveloped both flanks and destroyed the entire command, as they did against Custer's five troops, and as they very nearly did against the other seven.

It must be remembered that the Sioux warriors were all mounted and fought equally well mounted or dismounted. Under these circumstances an isolated cavalry command should never have attacked dismounted, and should have dismounted only when forced to do so for self defense. Major Reno, with Captain Benteen, was forced to dismount because he was nearly surrounded and because he did not know where Custer was and could not move away and abandon him. Nor could he carry his many wounded. Furthermore, the pack train had not yet arrived and he was short of ammunition.

It should be realized that a modern holding attack combined with an enveloping attack is not a division of force. The division of a command into a pivot of maneuver and a maneuvering force is not a division of force. It is only when the several echelons are separated beyond supporting distance of each other that such separation becomes dispersion. A division of force, in this sense, is justifiable only when we are certain we have overwhelming superiority in numbers.

Another episode, very interesting to the tactician, is Major Elliott's conduct of a flanking detachment in the affair on the Washita, which has been referred to already.

When Custer divided his force to attack the Indian camp, the affair went through very smoothly until Major Elliott saw some Indians escaping down the river valley. Now, in the accounts of this fight we find a very interesting statement. In effect, it is that Major Elliott called for volunteers to accompany him in the pursuit of these Indians. That seems curious to us today. Why should a major, in command of a squadron, have to call on volunteers to pursue the enemy? The nineteen men who joined him must have belonged to the troop or platoon of some captain or lieutenant. The major takes these men, thus disrupting the organization, and goes with only nineteen men on a mission that he should have sent an organized troop or platoon to perform. Certainly, the nineteen men, taken from anywhere in the squadron, were not organized in squads. They were just a mob that could not be controlled in the expert manner that we expect of trained troops.

The major abandoned his squadron without turning over the command to someone else. He was seeking glory at the expense of others and impairing the efficiency of his command for selfish purposes.

The loose organization of those days, when merely counting fours was believed to be sufficient to organize a group of from twenty to one hundred men, may have prevented him from sending a squad or a platoon on that mission. But he should have sent someone else in command.

The tragedy which followed is also a commentary on the knowledge and training of those days. The major pursued the Indians down the valley. Suddenly, he became aware that he was meeting more Indians than he expected, and then that he was surrounded. Realizing that he was cut off from his main command, he ordered his men to dismount, turn the horses loose and form a circle of defense in the tall grass. He had no field of fire. The Indians continued to shoot into the grass until they were satisfied that most of the soldiers were killed or wounded, and then they closed upon them. Nothing but their mutilated bodies remained to tell the tale. Although the firing was heard by the main command, Custer was so anxious to get away, and probably so uncertain of what Elliott was doing, that he left him to care for himself.

Suppose that this group of soldiers had been organized in two squads. Suppose that they had been trained as we have been trying to train our cavalry during the last fifteen or twenty years. The major, or whoever the leader might have been, could have pointed in a direction that would lead them back toward the main command, and then ordered one squad to make a pistol attack and to go through. He could have followed up this squad by the other one at about fifty yards distance. Almost certainly he would have got through with little or no loss. It has been done. The rear squad could have protected the leading squad from flank attacks. It could have fired to the rear if necessary to check any pursuit. The distance to go was not very far. Our drill regulations state that any for-

mation can be taken directly from any other and in any direction, right, left, rear or front, without having to wheel or maneuver units around to face the desired direction. This is accomplished because of our squad and platoon organization.

These things can be done if they are taught to the small units on the training grounds. But if no practice is had it is difficult to improvise them when faced with a critical situation. The most important principle involved in this affair was that so much emphasized at our Cavalry School. "A small isolated cavalry command that dismounts to

fight on foot is lost or accomplishes nothing." There are many instances to illustrate this principle. It applies generally unless the mission requires defensive action to hold a point or locality. Principle and practice are necessary. The study of principle alone is not sufficient. Troops must be taken to the training grounds and put through the evolutions that are necessary to carry out principles. And it must be done very frequently. Troops become formidable only when thoroughly accustomed to the practice of action. The tragedy on the Washita illustrates it perfectly.



Major General Daniel Van Voorhis

On July 1st Brigadier General Daniel Van Voorhis, commanding the 7th Cavalry Brigade at Fort Knox donned the two stars of a Major General, U. S. Army.



Major General Daniel Van Voorhis

As the General stepped from his quarters on that morning an escort of armored cars awaited him. The Post Adjutant administered the oath of his new office, upon completion of which, a battery of the 68th Field Artillery fired a thirteen gun salute, and the bugles of the escort troop sounded the flourishes for a Major General. General Van Voorhis was escorted to the main parade where the entire brigade was formed, dismounted, and was later marched in formal review.

Mechanization in the American Army owes much to General Van Voorhis. As a Colonel of cavalry, he was selected in 1929 by the War Department to organize the original mechanized force at Fort Eustis, Virginia, composed of personnel and equipment from all branches of the army. With his genius for organization and detail and his ability to create *esprit de corps* in a command, mechanization in the cavalry has advanced in a rapid, sound and progressive manner. Due largely to General Van Voorhis' tenacity, forcefulness, and clear vision the United States is now possessed of a mechanized cavalry brigade almost complete in its equipment, second to none in its mechanical perfection, training and capabilities, and unreservedly backed by a War Department policy that insures its proper employment.

The Story of My Life: An Autobiography

By Thomas D. Wadelton, Jr.

EDITOR'S NOTE: Perusal of the following contribution undoubtedly will explain why it received editorial acceptance. It is presented for genuine reading pleasure and to demonstrate the philosophy and psychology of army Juniors. This letter accompanied the story:

Dear Editor:

I tried to sell this but no one wanted to buy it, but they wrote me nice letters about it, so I am going to give it to you if you don't want to buy it,* because it is about the army some.

I think the army is swell and I guess I'll get to West Point when I am old enough, but my mother does not think so much about it, she says the Sweedish nation has not had a war in a hundred years, and she would like

to be a Sweedish person, but my father says the Eskimos havent had one either and would she like to be an Eskimo lady, but I guess not because she dont like cold winters.

I hope you like this story. Walter Winchell who is a great columnist wrote me he likes it very much too but it was not right for his paper, I lost his letter, I got North all right, but I had to come up with my mother by automobile, we had fun though and stopped at Virginia Beach for swimming.

I think I do pretty good type writing dont you think so, I learned mostly writing this story. Good Bye I am your friend,

TOMMY WADELTON.

My mother said if I could write a fairly good story, she would give me back my bicycle, but I could use her type writer, so every star has a silver lining.

I have not had my bicycle for a week because I rode it over Missionary Ridge to Hughs house which is out of bounds. I go to a Military school and I am twelve years old and I do not think I should have bounds, but my mother says it is not a question of age but of common sense, and unless I learn to use it I will have bounds untill I have long white whiskers.

Missionary Ridge is a very historical place where an important battle of the war between the states was fought. It is three miles from my house.

My mother is a red haired lady who writes stories too, she is an Irish lady and a pacifist, and my father says she is the only one in captivity, if she is one, which he doubts, because she gets in quite a lot of fights, once a policeman gave her a ticket she did not think she should have and she slapped his face and the police man said "for Gods sake lady" and went away, I was with my mother so I know she did it.

My father is an officer in the army and he said "Bet your life he do'nt want war, or any other soldier in the army either he says its too damed uncomfortable and the grub isent so good, but he do'nt go round yelling his head off about it, he says soldiers and policemen are necessary evils and their job is about the same.

My father is quiet and gentle and do'nt believe in me being spanked, my mother is a pacifist, but she spansk me for my own good she says and makes speeches at clubs and things, about World Peace, and gets my father in dutch with the higher ups, it is very confusing.

I go to the best school in the south, it is the Baylor Military Academy at Chattanooga Tenn. The head master is named Barks, (woof woof,) he is fine, pretty strict but he is young and plays games with us and jokes

lots, once I went to another Military school and the teachers were all about a hundred and eight, and they scared me to death most, we have a coach named Rike and the football team licked the pants off every thing they tackled, there is a rival military school here and Baylor made it look sick, I play on the "mite" team but I am pretty heavy and coach is scared to put me in much.

I made swell marks this term which, my mother said was more good luck then good management, and my father said, why not give the kid credit, and my mother said how about public speaking? which was my lowest credit, and my father said if there were any more public speakers in the family he would probably get court martialled.

My mother says a story must have a theme and a definite style, I will be the theme and maybe the style will come as I go along.

My name is Tommy, I live in the state of Georgia, on an Army Post I go to a Military Academy in the state of Tenn. which is twelve miles away, we wear a cadet blue uniform in the winter with a navy blue overcoat and a cadet blue cap, we have white uniforms for summer with white caps, we have black belts and gold buttons and a shoulder shield with "Baylor" on it, it looks pretty nifty.

I was born in London, England, but I do'nt remember it, I am an American, being born in England was an accident, my mother was there.

I have a dog who is a mongrel her name is Johnie, she got her name in a funny way, we had two puppies and we could not think what to name them, the orderly was always singing "Frankie and Johnie were sweethearts" when he fed them, so after a while when ever any one sang "Frankie and Johnie" they would come, so we started calling them Frankie and Johnie, Frankie died. I have a horse named Coventree, he is a thoroughbred and has brothers and sisters who are race horses and my father says he wishes they would send Coventree a card

*We bought it.

when they are going to win, and maybe he could make some money. He bet on Fighting Fox for the Derby.

My best friends are Carlyle, Hugh and Tommy, Carlyle and Tommy live here on the post, Tommy is thirteen, my mother thinks he has manners, he don't get into trouble, Carlyle and I get into trouble sometime, we moved all the "Stop" signs to the middle of the road, the cars were pretty thick and they stopped and got kind of tangled up and the M.P.'s had to come and untangle them, and Carlyle and I got reprimanded by the C.O. and mother laughed like anything, but my father said he did not think it was so damed funny.

Hugh lives on Missionary Ridge, his father is rich so he is not in the army. Hugh has a little auto of his own to ride in that goes by real gas his father can afford mostly anything so he has lots of toys and things, he got two new dogs, both good ones, last year.

There are lots of things my father can't afford but my mother says it is an honor and a dignity to be in the army, it would be nice to have money too though.

Army kids get around a lot, I have lived in Maryland and Conn, Texas, New York, Tenn and Georgia, I have been in Georgia twice.

I am a boy scout, This year I won the highest score in marksmanship for my age, I play tennis and golf, and I won the long distance swimming contest at Baylor, this sounds like bragging but I am just trying to get some style in this and get my bike back.

I like calf's liver and spaghetti and mystery stories. I have seven cousins in one family they are swell, when I visit them I can have what I like. For breakfast they cook me clams in butter, mostly I kind of diet, I am a little fat.

I would like to sell this story for some money and go north by train, I like riding by train better then anything, mostly we go places by automobile, last year I went to my aunties by train, I went all by myself, with \$19.45, when the train started out and my father and mother were gone I felt queer, I had the \$19.45 for food and emergencies, when I got to my aunties I still had \$19.05, ladies invited me to dinners and luncheon, the steward invited me to breakfast, I did not know how to stop them without being impolite, and it saved money, the forty cents I spent for chocolate and stuff, I did not have any emergencies, my father gave the porter two dollars to look after me.

I sent my mother a telegram and said I was all right but no one met me, my mother got scared and my father said she long distanced every body but the mayor, and in a little while six people came for me, my aunties got mixed up on the time.

My Aunties names are Mary and Catherine, when I was little I could not say their names and called them Ye Ye and Taddy, I like to call them that yet, last year I went half fare, but if I go this year I will have to pay forty dollars.

President Roosevelt lives at Hyde Park, N. Y. my aunties live right near him, they have a house with a lot

of old fashioned things I like old things better then new things, there are two ferry boats that cross the river to Kingston one is named the Transport, it is 80 years old and still good, it carries cars and people, Ye Ye says she used to cross on it with her father when she was a little girl, they had a team of horses and a surrey, a surrey is a wagon, with a cloth top and fringe on it and two seats, she has a picture of it, It must have been fun, I think I would like it better then an auto, the only horse and wagon I have been in is Fred the grocer at my aunties place, he likes kids and lets me drive sometimes.

We go to different places, I have been to St. Augustine, Fla, and through Fort Marion, one place you get down on your knees and creep into a dungeon, when the United States bought the place from Spain they were digging around and found this dungeon, with some skeletons chained up on the wall, no one ever knew who they belonged to, some said they were political prisoners, and some that a lady might have liked another gentlemen better, and her husband chained them up, I think that would be a dirty trick.

We went to Anastacia Island and saw the rattle snake pit, my mother looked at them and threw up, we saw ostriches and alligators then we went along a road through a place all wild and ferny, right by the ocean side, we found a little road that went right down to the water, there were thousands and thousands of sea gulls, Johnie our dog was with us and she tried hard to catch the gulls, and she chased the waves out and the waves chased her back untill she had to lie down and pant. We had our lunch on the beach and my father and I went in swimming in our drawers, my mother did not want to unpack the bags for the bathing suits and she said she was sure no one had been on the beach since Christopher Columbus landed there, then we went to Daytona Beach where they have the auto races only they were not having any then, John D. Rockefeller lived there in a big white house, but he is dead now and do'nt live there any more.

Easter Sunday we were at a hotel right in the middle of an orange grove, the blossoms were swell. they had colored eggs for breakfast I had four.

One year we went to Virginia Beach, mother and I built big fires on the beach and had our supper out there, sometimes sea turtles that weigh a couple of hundred pounds get washed up on the beach, they get killed by the propellers of the boats at sea. They do'nt smell so good. There are thousands of fiddler crabs on the beach they run like the dickens, one day my mother propped her movie camera, by one of the holes and lay still for a couple of hours trying to get a movie of a crab and when she got home she found there was'ent any film in the camera. When we left we put the car on a big boat to Cape Charles, it takes four hours to cross the bay, I love it, I love all boats, I think I will go into the Navy when I grow up.

I have been to Washington and saw Congress, the Senate and the Zoo, I have been in the Smithsonian Institute, saw Mr. Linbergs plane that he crossed the ocean in, been

up in the Washington Monument, saw the Lincoln Memorial, and the room Mr. Lincoln died in, and the theater he was shot in.

In New York I went to the Aquarium and saw all the funny fish and saw Al Smith, and many other interesting sights, The Empire State Building, Radio City and Brooklyn, Metropolitan Museum and Childs Restaurant, The Planetarium and the pre-historic animals in the Museum of Natural History, I have two cousins there who have a lot of million dollars, they have a chauffeur named Matt I liked when I knew him, I have ridden in the subway, on the elevated and the Fifth Ave busses, I like the open faced one's best, I guess that is all about New York.

Once I thought I remembered before I was born, I thought I lived up in heaven and looked over the edge of it and saw my mother and father walking around the earth, my father says maybe I did for he has been walking around the earth for quite a while, but I guess I just thought I did.

When I go visiting outside the army, at first it seems queer, in the posts the first thing you hear when you wake up is the bugle playing ta-ta-taaa, and after a little while you hear it again and the cannon goes boooooooooom and you get up except Saturdays when there is no school, all day untill eleven o'clock in the night, the bugler plays tunes, I can play most of them on the piano, there are a great many (twenty-four) the prettiest are "Reveille"

"Boots and Saddles" "Retreat" "To the Colors" and "Tattoo" the last one is "Taps", this is the one they always play over the graves of soldiers. It is beautiful but it gives the queerest shivery feeling when you hear it, I have'nt heard "Taps" many times because I am asleep when it blows, just since I am big enough to help with the Christmas tree and New Years Eve, I do'nt beleive in Santa Claus any more but I did untill I was ten, we have a boy at school named "Claus", every one calls him "Santy".

Soldiers are pretty swell people, I have lots of good friends with soldiers, the cook in the club do'nt like me so much, but he is not a soldier, he is a colored man.

An orderly is a soldier who takes care of an officers boots and horses and does little jobs for him, we had an orderly named Gallaway from Copperhill Tenn, we all liked him a lot he got killed when he drove his car into a tree in the dark, just a little while ago, we have a boy named Garner now, he is pretty good too.

The flag goes up at sunrise and down at sunset, the army kids are taught to stand at attention from the time they are little bits, there was a little fellow on the post that was so young he wore diapers, but he always got up when the cannon went off and saluted, his tummy stuck out in front and he stuck out behind too, and it was a full hard to keep from laughing he looked so funny.

This is the story of my life.



A Regimental Contest

Officers of the 312th Cavalry, Major J. T. Minton, Cavalry, Unit Instructor, participated in a contest to determine the officer earning the most hours of training through extension courses conducted during the period October 1, 1937 to May 31, 1938.

Captain Herbert F. Krucker, Cavalry Reserve, finished first in this field with a total of 185 hours, and will receive the saber offered by 1st Lieutenant Jack Berg of El Paso, Texas.

The second prize in this most educational contest was earned by 2d Lieutenant Carol C. Hines, Cavalry Reserve, Carrizozo, New Mexico, who completed a total of 108 hours. Lieutenant Hines earned a year's subscription to the *United States Cavalry Journal*, kindly donated by Major Thomas F. Mishou, commanding the second squadron of the 312th Cavalry.

It is a source of much editorial appreciation to note the interest in and support of the *CAVALRY JOURNAL* in the 312th Cavalry.

THE MOUNTED ATTACK

In Open Order

By Colonel H. S. Stewart, Late 15th Lancers, Indian Army

Successful mounted attacks in open order were of frequent occurrence in the late great war. This formation is no modern innovation, but is based on light cavalry tactics evolved from the beginnings of war. Formerly such action was sometimes termed "the attack as skirmishers," or "the attack as foragers." The Cossacks called it "Lava."

Although open order is unsuitable against cavalry which closes its intervals and charges home with the *arme blanche*, it probably will be the most usual type of mounted action in future, as it is the most suitable formation for attacking dismounted cavalry, artillery or infantry.

Attacks on artillery and dismounted cavalry will be more usual than attacks on infantry. Even where covered lines of approach favour surprise and minimize losses, opportunities for mounted action against infantry, except where the latter is exhausted, demoralized, isolated or holding a position without depth, will be rare. Against inefficient or demoralized infantry a mounted attack is generally preferable to a dismounted one, because, should an attack by dismounted cavalry hold any prospect of success, a mounted attack will normally achieve quicker and greater results with fewer casualties. This is borne out by the experiences of the Palestine Campaign and elsewhere.

The tactics of the attack in open order are entirely dissimilar to those of the close order attack, because the purport of open formation is to minimize losses from fire, while the purport of close order is to give weight to the shock. Whereas in shock tactics cavalry manoeuvres at the "trot" as long as possible, to keep its horses fresh and to preserve cohesion, in open order dressing and cohesion can be sacrificed to the fastest possible pace which, combined with extension, gives the most effective protection from loss in the fire zone. Extension should be greatest in the leading line, and decrease in those following. The attack is made by a succession of extended lines, and the number of these lines is governed by the depth of the position to be attacked.

The distance between the various attacking lines should not exceed two hundred yards, as otherwise the enemy may recover from the attack of one line before the next is upon them, and much of the moral effect will be lost. Supporting lines intended to complete the attack or to take on subsequent objectives, should move in fairly close order. The object is to strike a series of rapid blows; each line should take advantage of what the preceding line has

effected, but each objective is to be attacked by two lines at least. The reserve should be on a flank, in column.

It is essential that there should be definite objectives, surprise, coördination of fire and shock, determination, pace, depth, and if possible coöperating flank attacks. To prevent the front ranks of the enemy from firing into the backs of the leading lines of the attack as they gallop on, the supporting lines of the attack must take advantage of initial success to "mop up" any bodies of enemy which attempt to rally after the leading lines have ridden over them.

Once a cavalry commander has launched an attack he should locate his head-quarters where he can best observe the fight, and issue such orders to his reserves as may be advisable. As opportunities are fleeting, any indecision in seizing chances will probably be fatal to success.

Victory will depend on:

- (a) The "*apropos*" attack.
- (b) The capability and influence of the leader.
- (c) Morale.
- (d) Luck.
- (e) Surprise.
- (f) Personal Reconnaissance.
- (g) Utilization of ground.
- (h) Plan, Orders and Time available.
- (i) The combination of Fire and Shock.
- (j) Support by other arms.
- (k) The non-existence of serious obstacles.
- (l) The action of Supports and Reserves.
- (m) The Immediate Rally.
- (n) The Horses' condition. (Horsemastership.)

The Apropos Attack.

Napoleon said, "Cavalry charges are equally good at the beginning, during the course of, and at the end of a battle. They should be made as often as possible on the flanks of the infantry especially when this last is engaged in front."

As the value of a cavalry attack is largely dependent on its being launched at the moment when its effect will be greatest, it is most important that the attack should take place at exactly the right moment and on suitable ground. De Brack asks, "On what does the success of charges depend?" He answers, "On the *apropos*." He then asks, "Why is it difficult to hit on the '*apropos*'?" and answers, "The knowledge of the '*apropos*' is the genius of war."

Capability and Influence of the Leader.

History bears witness to the decisive influence of individuals on the fortunes of cavalry; mounted rabbles, inspired by great leaders become formidable cavalry. The importance of the leader's personality is out of all proportion to its importance in dismounted work, as leaders of mounted formations never have time for meditation. As decisions must be instantaneous, instinct and genius are essential. The instinct of the leader must quickly disclose to him the opportunity of making a charge; this occurs and passes away again in a very short time. A characteristic of the true cavalry leader is to act immediately when he recognizes an opportunity. A man tied down with definite orders must let opportunities pass; so it is most important that regimental and squadron leaders should be delegated with sufficient independence to avoid missing chances.

MORALE

Colonel Ardent du Pic asks: "Why is it so hard to use cavalry well?" and answers: "Because the rôle is all movement, all *morale*; *morale* and movement so closely allied that often movement alone without a charge, without physical action of any sort, makes the enemy retreat, and if that is followed up causes his total rout." *Morale* is more important to cavalry than to any other arm because all cavalry action must be sudden, and men have no time to prepare their nerves to face a crisis.

It is essential that all ranks should believe that they can ride down the enemy.

LUCK

Napoleon and other great commanders frequently inquired whether some officer was "lucky." What is implied by "luck" is difficult to define, but it is associated with that instinct which perceives those occasions when logic and prudence should be made subordinate to intuition. Safe courses seldom lead to great successes; logical plans mitigate against surprise; but good luck can protect those that take the chances which must be taken by those who wish to achieve great success.

SURPRISE

Surprise is of primary importance in mounted attacks. Even should an enemy know that an attack is imminent, provided the ground is favourable the actual delivery of the attack may come as a surprise; especially if it comes from a direction different to that of the approach march. But rapidity is as essential as concealment.

Usually opportunities for surprise can only be taken full advantage of when the cavalry is sufficiently concentrated. Cavalry commanders must be prepared to seize opportunities, as these quickly pass away. Surprise by large bodies of cavalry is difficult of attainment, and depends on suitable conditions of cover, ground, and morale. Small bodies of cavalry may, by surprise, achieve results out of all proportion to their strength. While leaders must ever make use of any available cover from view to facilitate surprise, once within striking distance, a rapid and determined advance will be more effective than the elaborate turning

movements which will probably result in opportunities being lost.

PERSONAL RECONNAISSANCE

There is seldom time for detailed reconnaissance; so experience and instinct must be the main guides. The man with a natural "eye for country" has an inherent advantage, but "following Hounds" is valuable training for developing this faculty.

UTILIZATION OF THE GROUND

Favourable ground facilitates the surprise and permits attacks, particularly those directed against an enemy's flank, being hidden from view during the approach march. Undulating ground, giving cover from view but not interfering with free manoeuvre, minimizes casualties; as in mounted warfare, effective fire can seldom be directed on moving targets concealed from view.

PLAN, ORDERS AND TIME AVAILABLE

Complicated plans do not lead to success; simple plans are essential. Mounted actions develop quickly and there is generally no time for long explanations. Orders must be concise, merely indicating the general plan and general objects. Every commander must then do his best to achieve victory without waiting for further orders that will not come. Attempts should invariably be made to outflank the enemy's line, but this will not always prove possible. The tactical situation may necessitate a mounted attack being carried out, even when conditions are so unfavourable that the destruction of the cavalry is almost certain.

THE COMBINATION OF FIRE AND SHOCK

A principle, coming down from ancient times, is that the foundation of success is the combination of fire and shock. Mounted attacks should be supported by the fire of all available guns, machine guns, armoured fighting vehicles, and riflemen. While cavalry can fight on foot, it is not economical to dismount cavalry to supply fire which can equally well be given by other arms. Covering fire should be primarily used to establish superiority over the hostile fire, and secondly to inflict losses and cause confusion in the enemy ranks during the final stages of the attack.

SUPPORT BY OTHER ARMS

Napoleon says "Infantry, Cavalry and artillery are nothing without each other," and that cavalry has more need of artillery than infantry because it fights with steel not fire. In certain ways mechanization makes the problem of support more simple than it formerly was, as mechanized infantry and artillery as well as armoured fighting vehicles, can accompany cavalry whenever the country is suitable. But if the cavalry is trained to rely too extensively on mechanized support, it will shrink from working in areas where the vehicles cannot accompany.

NON EXISTENCE OF SERIOUS OBSTACLES

The failures of mounted attacks are more likely to be

caused by physical obstacles than by the volume of the fire met. The effect of fire may be avoided or at least minimized, but the existence of unforeseen obstacles may completely wreck any attack however well conceived or executed. Many disasters have resulted from launching attacks over ground which has disorganized the attacking lines or even completely checked the advance long before reaching the enemy. In addition to natural obstructions, wire, trenches, and shell holes, have now created a class of obstacles formerly non-existent.

THE ACTION OF SUPPORTS AND RESERVE (i.e. DEPTH)

The old maxim "that victory belongs to the side with the last intact reserve" is universally admitted.

De Brack is of the opinion "almost all failures of charges are due to the slowness or ignorance of the supports. A charge badly supported, no matter how bravely begun, becomes only a bloody affair; while one well supported is always victorious and decisive." Jomini states: "It is also of importance, especially in cavalry, for the commander to increase the depth rather than the extent of the formation. For instance with two brigades deployed, it would not be a good plan for one brigade to form a single line behind the other, but each to have one regiment in the first line and one in the second; each brigade thus having its own reserve behind it. A general cannot control deployed regiments. It would be well to have a general reserve for the whole division. With troops and commanders on both sides equally good, the victory will remain with the party having the last squadrons in reserve in readiness to be thrown on the flank of the enemy's line while his front is engaged."

When there is any danger of a cavalry counter-attack, echeloned supports give protection to the flanks, and confidence to the front lines; they both threaten the enemy and are favourably placed to exploit success, but the same body should not be given the double duty of protecting a flank and of striking the flank of the enemy.

THE IMMEDIATE RALLY

When the fate of an attack hangs in the balance, any formed body has a value far in excess of its numerical strength. Units which can rally quicker than their enemies can be led into action at a time when victory is in the grasp of whoever can seize it.

The quick rally has ever been such an essential part of cavalry training, that its importance was even realized in the feudal days; Richard Coeur-de-Lion's victory over Saladin at Arnsouf was partly due to the King's insistence on rallying after each success. Cromwell's cavalry was carefully trained in the quick rally, and he owed his victories primarily to this. Frederick the Great laid down: "His Majesty will most particularly observe that squadrons learn to rally quickly"; also that "it must be impressed on every hussar that he must be most attentive to the sound '*Appell*,' on hearing which he should join his squadron and rank with the utmost rapidity." Von Schmidt says: "An acknowledged authority in our Army writes 'that the cavalry remains master of the field which

can most quickly rally and reform.'" Lord Haig wrote: "The rallying after an action, mounted or dismounted, requires careful thinking out and constant practice."

When ordered to rally, every leader will collect behind him the men in his vicinity not actually fighting; such men should not attempt to rejoin their original troops. Troops will rally in line, Squadrons and Regiments in line or column as most convenient.

THE HORSES' CONDITION (HORSEMASTERSHIP)

When horses are not well cared for, cavalry cannot properly carry out any of its duties in war. Cavalry horses are not always under an officer's eye, nor is their work regular and slow like that of the artillery and transport horses. On detached duties a great strain is thrown on the horses, and they are then dependent on the care exercised by their individual riders. Neglected animals soon cease to be able to carry their riders; so every trooper must, therefore, be trained in Horsemastership, which will only be acquired through a combination of careful teaching and long experience. It is the basis of cavalry mobility. Even in attacks, to keep the horses as fresh as possible, the gallop should never commence before it is absolutely necessary; preferably it should not start till within striking distance, otherwise the horses will be blown and exhausted, but, at times, protection from fire by fast movement must take precedence over the horses' condition.

Failures will usually be the result of:

- (a) Unforeseen obstacles.
- (b) Failures in the coördination of fire and shock.
- (c) Faulty dispositions.
- (d) Ignorance or underestimation of the enemy's strength and disposition.
- (e) Failure to limit the objective and restrict the zone of pursuit, and omission to indicate, in advance, a rallying area.

Unforeseen obstacles and the combination of fire and shock have already been discussed. Limiting an objective or restricting a zone of pursuit are not simple matters; they, like designation of a rallying area, are intimately connected with the development of the tactical situation. However, the clearer the leader makes his intentions, the more easily will subordinate commanders be able to co-operate in controlling the course of the fight within the indicated limits.

Ignorance or underestimation of the enemy's strength will result from bad reconnaissance and lead to faulty dispositions. Cavalry commanders cannot expect always to have complete and accurate reports of the enemy's strength and dispositions; therefore they should work on plans sufficiently elastic to allow of modification as events develop. Once any unit is launched in an attack it is out of the hands of the commander till it rallies. Action of the supports and reserves is the only means of remedying initial errors in dispositions. Whenever a leader has to throw in the last formed body available, his usefulness as a leader lapses, and he may well head the last reserve with a determination to lead it to victory or to perish with glory.

Command-Control-Communications

A REGIMENTAL VIEWPOINT

By Lieutenant Colonel W. M. Grimes, 2d Cavalry

GENERAL

During the past two years the 2d Cavalry in its many exercises in connection with the Cavalry School has been experimenting with and developing a system of command and control for a war strength regiment. What is contained herein was tested in the Fourth Army maneuvers conducted at Fort Riley, Kansas, last August, in which the 2d Cavalry participated as a part of the Provisional Division, commanded by Brigadier General Guy V. Henry, U. S. A. The regiment being brigaded with the 114th Cavalry in a Provisional Cavalry Brigade which was commanded by Colonel D. R. Rodney, Cavalry.

The 2d Cavalry's peace strength permits the organization of a war strength regiment, less one squadron. The regiment habitually participates in the Cavalry School field exercises and maneuvers with two squadrons of three troops each, a caliber .50 and caliber .30 Machine Gun Troop and Headquarters Troop; all units completely organized and equipped in accordance with the Tables of Organization 423-T, Cavalry Regiment (Horse) (War Strength, Tentative), War Department, Washington, D. C., July 1, 1936.

There is considerable difference in the control of a war strength regiment and one of our small peace strength units of approximately 700 men. This article is written to indicate what was developed in the 2d Cavalry, the only regiment which can be and is organized on practically a war strength basis.

HEADQUARTERS TROOP

From the viewpoint of a regimental commander control of the regiment is exercised through the facilities of Headquarters Troop. The peace strength organization of the Headquarters Troop, 2d Cavalry, is identical to the war organization of Tables of Organization 424-T (War Strength, Tentative) Headquarters and Headquarters Troop, Cavalry Regiment (Horse), War Department, July 1, 1936.

The Headquarters Troop is employed in the field as a basic regimental agency of command, staff, communications and supply. The troop does not function as a unit. Its duties include establishing and maintaining a Forward Echelon for regimental headquarters; providing the means for rapid and distant reconnaissance; establishing communications; and insuring the delivery of rations, forage, gas, oil, ammunition and other essential supplies; and the

establishing and maintenance of a Rear Echelon for Regimental Headquarters.

To facilitate operations and functioning on the march or in the field, Headquarters Troop is divided into a forward and rear echelon.

The forward echelon is divided into three parts: the scout car group, the commander's group and the command post group.

The scout car group consists of the scout car platoon.

The commander's group consists of those members of the regimental staff and of the Headquarters Troop who are necessary to keep the commander informed of the situation and to enable him to prepare, record and transmit his orders.

The command post group contains the personnel, material, and horses (less those in the commander's group) that are necessary to establish the command post group and to maintain communication. During combat it may be combined with the commander's group to form the command post.

The rear echelon contains the personnel, matériel, horses and motor transportation required to perform the administrative and supply functions of the command. It is divided into a horse group and a motor group.

The horse group includes the personnel of the rear echelon mounted on horses.

The motor group consists of the transportation platoon, with the light wagons of the rifle and machine gun troops when the wagons are trailed.

The Scout Car group moves as directed by the regimental commander.

The Commander's Group marches at the head of the main body. It may march with the advance guard when there is one. The regimental commander may take all or a part of this group with him on reconnaissance.

The Command Post Group marches in rear of the Commander's Group, usually in the order: Message Center Section, Radio and Panel Section, Elements of the Command Post Group not required for functioning on the march with the horse group of the rear echelon, or in a place or places in the column designated by the regimental commander. (Figure II.)

The Horse Group of the Rear Echelon marches at the rear of the combat echelons as directed.

The Motor Group, under the Transportation Officer,

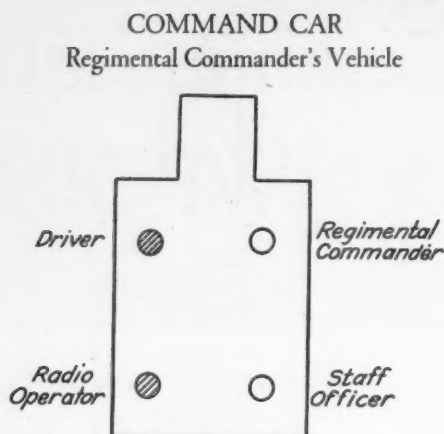


FIGURE I

NOTES

- (1) The Command car is a radio equipped scout car, used primarily by the regimental commander for reconnaissance and inspections where time and space factors require rapid movement; the radio enables the regimental commander to keep in constant communication with his command post and various elements of the regiment.
- (2) When the regiment is operating as a part of the brigade the radio of the command car is in the brigade net.
- (3) In case of emergency, radio operator, regimental commander and the staff officer operate weapons of this car.
- (4) Driver and radio operator of this car are trained to be interchangeable.

FORWARD ECHELON
Regimental Headquarters on March

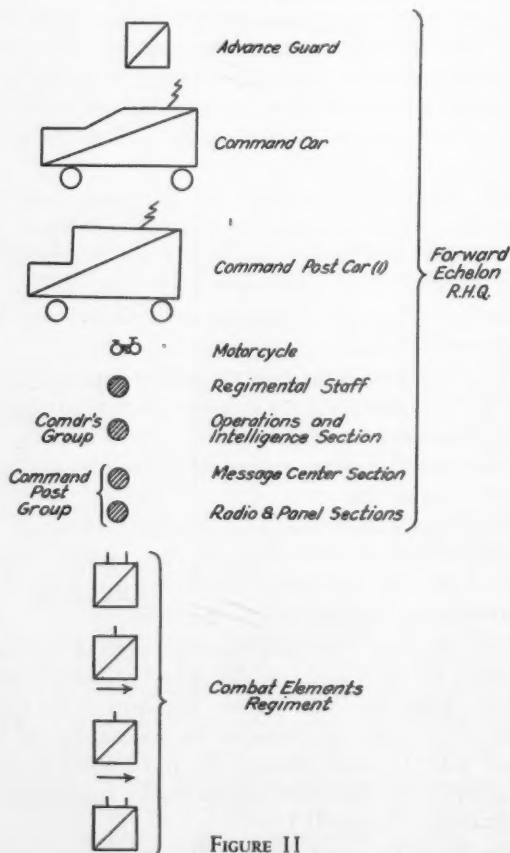


FIGURE II

NOTES

- (1) The command car and the command post car move by bounds in the interval between the commander's group and the advance guard.

COMMAND POST — ON MARCH
Detailed march dispositions of Forward Echelon RHQ.
Command Post Car (Radio Truck)



FIGURE III

NOTES

- (1) The command post car constitutes the normal command post and message center of the regiment; when for any reason it cannot function as such, the command post group (horse) takes over its functions.
- (2) In this car a combined operations and intelligence situation map is kept posted and maintained by the intelligence sergeant.
- (3) The Communications Officer habitually rides in this car when it is functioning as the command post.
- (4) The regimental commander and Executive Officer often ride in the car in order to keep close touch with the developments of a situation. Likewise S-2 and S-3 will be with the truck as the situation requires.

moves by the route and the rate as directed by the Regimental Supply Officer.

The assignment of personnel to echelons and groups may be varied by the regimental commander to suit the terrain and the mission. The following table, however, serves as a guide for such assignments.

The regimental staff consists of the following:

Rank	Title	Abbreviation
Lieutenant Colonel	Executive	R-EX
Major	Plans and Training	S-3
Captain	Adjutant	S-1
Captain	Intelligence	S-2
Captain	Supply	S-4

TREND OF DEVELOPMENTS

The principal development, a departure from past procedure, concerns the operation and functioning of the Forward Echelon RHQ with particular reference to command, control, and communications.

Command control and communications are inseparable. A commander exercises control through leadership, per-

sonal visits, observation and communications. In small commands the function of command is not as complex as in larger ones. In the war strength regiment, due to the wide frontages and distances at which elements operate, command and control are increasingly difficult, communications assume greater importance.

In the past it has been customary for the regimental commander to control his regiment habitually from the saddle. The modernized regiment is controlled best by utilizing a combination of horse and motor.

A commander must keep in close touch with the situation, either by personal contact or through his communications. While the mounted messenger is a principal means of communications in many situations, the motorcycle messenger and the radio are essential in situations where the regiment is operating at extensive distances. It is unwise to rely upon one means to the exclusion of others, because special circumstances may make the preferred system inoperative when communication is urgently needed. Information is of value when it is timely; quick, reliable communications make this possible.

COMMAND CAR

By providing a motor vehicle known as a command car, a regimental commander is able to perform rapid reconnaissance, visit distant elements and maintain continuous communication with his regiment; in other words the command car facilitates command and control.

As developed, the command car consists of a radio equipped scout car used primarily by the regimental commander for reconnaissance and inspections; ordinarily a staff officer and a noncommissioned officer from the Commander's Group accompany the Colonel. (See Figure I for details.)

COMMAND POST

The modern regiment requires two types of command posts to facilitate command and control. Accordingly provision has made in the Forward Echelon of RHQ for a motorized command post in addition to the mounted or horse set-up formerly provided.

The regiment has developed a command post car (radio equipped truck, Indiana). It is a combination message center and command post; a combined S-2-3 situation map is maintained in the truck. (Figure III.)

The tactical situation, terrain, and weather may preclude the use of this motorized command post, in which event a part of the mounted personnel of the Communication Platoon constitute and operate the command post.

The regimental command post must be in continuous operation whether the regiment is on the march or at the halt. There is a continuous flow of incoming and outgoing messages; the means of transmission are the radio and messenger; obviously on the march and in rapid moving situations the handling of numerous messages (transmitting, recording, etc.) is facilitated when the command post car is used.

The use of pack radio by the regimental command post

(NCS) is believed exceptional and is resorted to only in situations where the motorized command post cannot accompany the regiment.

MESSAGE CENTER

Two (2) types of Message Centers are available to the regiment; one a motor set-up in the Command Post Car, the other a horse set-up used when the Command Post Car is not applicable.

The message center functions at all times, especially is this so with the speedy means of communication now available to the regiment. In certain situations, reconnaissance for example, a continuous flow of information can be expected. Since much of this will be transmitted by radio, it is essential that a radio (NCS) be in operation at the command post.

The Command Post Truck greatly facilitates the functioning of the message center. The personnel operate under fairly satisfactory conditions and radio communication is continuous.

When the message center personnel operate as a horse unit in a moving situation such as a march, the disadvantage is that radio communication is not continuous, due to the employment of pack radio.

(See Figure IV for details.)

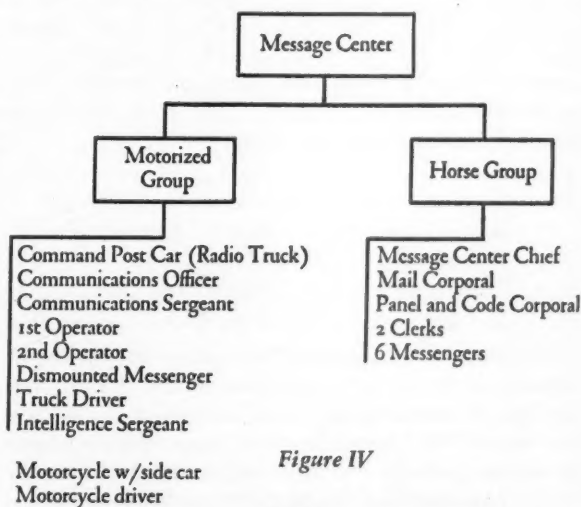


Figure IV

NOTES

- (1) The Message Center is the Regimental Agency charged with the receipt, transmission and delivery of all messages passing through it. It exists primarily for service to the Regimental Commander and his Staff, and furnishes this service by:
 - a. Providing a fixed locality to which messengers or messages may be directed.
 - b. Coordinating the various agencies of Signal communication available to the regiment.
 - c. Keeping temporary but reliable records to insure the prompt and accurate handling of all messages passing through it.
- (2) The message center is neither organized nor equipped to perform stenographic or clerical work pertaining to the different staff sections, nor to prepare additional copies of incoming messages for multiple distribution, nor duplicate copies of outgoing messages for record purposes.
- (3) Procedure:
 - a. Normally the Motorized Group (Command Post Car) clears all incoming and outgoing messages, which includes as routine such operations as receiving, transmitting, cryptographing and decryptographing, recording and selection of proper channels of communications.
 - b. The Horse Group is supplementary to the Motorized Group and in the event the latter is unable to function, will take over the duties outlined above. It will be noted that if this event occurs it is possible that temporarily the message center will be without radio until a pack set or scout car is directed to this mission. Normally the Horse Group handles messages service and panel communications.

Special Activities

Exhibition Tour of the United States Army Equestrian Team

By MAJOR FRANK L. WHITTAKER, Cavalry

Every four years the financing of the participation of the Army in the Olympic Games is a major problem and because of a ruling of the Olympic Committee that each sport must finance itself, the duty of raising these funds is placed squarely upon the Army. One of the means selected in 1935 was an exhibition trip by the Equestrian Team through the Middle West. This was so successful from all viewpoints that arrangements were made to repeat the tour in 1938, two years before the 1940 games with the hope that most of the money could be secured by this means at an early date so that there would be no necessity to interrupt the training at a later time in order to raise funds.

After the necessary authority was secured, all arrangements for the trip were made by the Office of the Chief of Cavalry in Washington, D. C., the work of the Equestrian Team at Fort Riley being confined to getting the horses in shape, preparing the jumps and furnishing the necessary material for publicity. The team visited the following cities on the dates shown:

Detroit	April 29-May 1
Louisville	May 4-5
Indianapolis	May 8
Columbus	May 11
Cleveland	May 13-14
St. Louis	May 18-21

Local committees had been set up for the purpose of making all the necessary arrangements and the tour was handled in somewhat the same manner as a theatrical tour would have been. In other words, the committee secured an arena for the exhibition, arranged all the physical details, provided the necessary publicity, using material furnished it by the team, sold the tickets, provided ushers, ticket men, and jump details, and cleaned up afterwards. The team furnished the advance publicity, brought on the complete show, had its own manager, ringmaster, announcer, and jumps, and, using the arrangements provided by the committee, put on the show. Then, after all bills were paid, the net proceeds were turned over to the team.

The group consisted of eight officers and was organized as follows:

Major Frank L. Whittaker—Manager,
Lieutenant Charles A. Symroski—Assistant Manager and Ringmaster,
Captain Milo H. Matteson—Team Captain,

Major Hiram E. Tuttle,
Captain Royce A. Drake,
Lieutenant Franklin F. Wing, Jr.,
Lieutenant W. H. S. Wright,
Lieutenant Scott M. Sanford.

They had with them 15 horses, 17 enlisted men, 3 horse vans, 2 trucks and 2 passenger cars. The party, which was a self-contained motor unit, carried all its own jumps and necessary paraphernalia. The horses taken on the trip were divided into three groups: *Dakota, Dinger, King-Hi, Renzo, Masquerader* comprised the Prix des Nations group; *Don R., Walter Knapp, Podhorski, Scamps Boy, Henry Watterson, and Glorious Gordon*, comprised the 3-day group; *Si Murray* and *Vast* were used for dressage; and *Flitter* and *Fralax* were spares.

The same program was given at each performance although the jumping courses were varied whenever more than one performance was given in each city. At St. Louis the fact that the exhibition was put on in conjunction with their horse show required that only parts be given at various times. The program used everywhere except at St. Louis was:

Opening Ceremony, including an escort to the colors and introduction of the team.
School Ride by six officers.
Longeing Exhibition.
Jumping of 3-day Horses.
Dressage Exhibition.
Jumping of Prix des Nations horses.
Closing Ceremony.

The team was enthusiastically received at every performance and, in the words of a great many people in and out of the service, "did more good for the Army and for the horse than anything that had happened since the trip in 1935."

The following are interesting sidelights on the trip.

From the time the team left Fort Riley until it returned, it covered 2,800 miles. Of this distance, the horses moved 800 miles by rail and 2,000 by horse vans. The three horse vans used were the semi-trailers recently issued to Cavalry regiments, modified by the addition of stalls. These vans operated perfectly during the entire trip.

The assembly of the trip at Detroit was a minor problem in concentration. Monday, April 25, had been selected for the assembly date and on this date the manager arrived



Top—Captain Drake on Glorious Gordon, a "three-day horse." Perfect form of the horse. His front legs are folded to the maximum to enable him to clear without touching.
Bottom—Henry Watterson, a "three-day horse." Lieutenant Sanford up.

from Washington by train, the assistant manager in his own car from Fort Riley, the horses by express from Fort Riley, the horse vans carrying the jumps and baggage from Fort Riley, a passenger car with four officers from Fort Riley, Major Tuttle by train and his two horses by

freight from Cincinnati, and two trucks from the 7th Cavalry Brigade (Mecz.) at Fort Knox. Before 10 o'clock that night, the entire group had been assembled.

Jump materials sufficient to set up a course of 18 jumps, all different, consisting of post and rails, walls, brush, Liverpool, Toronto bank, Toronto chicken coop, various types of gates and others were carried in *one* truck. Each jump was specially constructed so that it could be taken apart and packed flat.

Some horses lost weight on the trip but as many gained weight.

Surprisingly enough the exhibition of longeing was one of the most popular given. Few people had ever seen a horse longed, particularly over jumps, and were amazed at the quietness and the smoothness of performance and the control exercised by the officer handling the longe.

The longest continuous move was 419 miles from Detroit to Louisville and was made in 18 hours. Irrespective of the length of the move horses were not unloaded until they arrived at their destination as it was thought preferable to arrive there as soon as possible. The condition of the horses at the end of the trip proved this action correct.

In sixteen performances over twelve to fifteen jumps each time (approximately 168 jumps), *Dakota* knocked down only two bars.

At Detroit on Saturday afternoon, May 31, the horses on the team jumped 165 jumps with only one knock down.

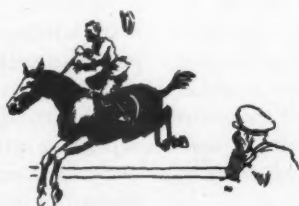
At Louisville, after the performance, a Cavalry officer who has been closely identified with international competitions for many years stated that he had never seen as fine performances by horses and riders over such a difficult course.

Ten thousand school children saw the exhibition, May 19th, at the Walsh Stadium in St. Louis.

On Saturday night at St. Louis, the last performance of the entire trip, the horses jumped better than at any other time. *Dinger* got out of stride on two jumps and knocked down. All other horses completed the course without a fault.

All horses unloaded at Fort Riley after being on the road travelling almost continuously for a month, perfectly sound, without a scratch and, in the opinion of the captain of the team, in as good shape as when they started.

And last, a very substantial amount of money was realized from the trip.



An Interesting Grazing Experience

By DON L. DEANE, First Lieutenant, Veterinary Corps

The Seventh United States Cavalry, while on the annual practice march, June, 1937, encountered various interesting and unusual hiking conditions. The march, for the most part was confined to rough mountainous terrain which provided an abundance of good grazing and which, in one respect, might easily have become a superabundance.

Upon entering the Sacramento Mountains in South Central New Mexico our attention was attracted to the presence of a luxuriously growing, bunch type, grass that to our desert accustomed eyes appeared luscious from the standpoint of our equine friends. Someone mentioned, however, that this plant was known locally as "Sleepy Grass" and that it would be necessary to take precautions against any possibility of the animals grazing in the vicinity of this growth. This seemed a bit ironical considering the prolific appearance of the plant and the definite inclination of the animals to utilize its seemingly apparent nutritive qualities. However, resigned to our fate in this regard, precautionary measures were inaugurated so that at each halt and camp site the horses were unable to consume any of the so-called "Sleepy Grass." Upon our arrival at one camp the grass was so prevalent that it was necessary to clear the ground near the picket lines in order to eliminate the possibility of untoward sequela.

It is interesting to note the fact that animals oriented to this section will not touch the grass except as a last resort. It is reported that following the first freeze the grass loses toxicity.

It had been the opinion of some of the officers for several days that the local inhabitants might be attempting to discourage grazing with a view of conserving the grass supply for their own stock and suggestions were made that we conduct an experiment to determine just what, if any, effect would be produced by this plant upon a test animal. Consequently, upon arriving at the aforementioned camp and after cooling out, a horse, Preston brand number 9C98, was staked out and a plentiful supply of harvested green "Sleepy Grass" was placed before him, this he attacked with fervor as no other hay or grain was offered. After approximately three hours it was noticed that the animal was somewhat depressed and showed only occasional interest in the grass; however, he continued to eat intermittently. The depressed condition became progressively more manifest until about five hours had passed when a definite condition of hypnosis was present, co-existent with a retarded and weakened pulse, respiration slowed and shallow, temperature normal, head hanging, eyes closed, standing with legs crossed and was uncertain as to the use of his feet. In an attempt to mount the animal it was found that no effort was made to support the added weight; he nearly went down. Movement, when forced, was languid and performed with difficulty.

The effect was apparently confined to a hypnosis in that no anesthesia was evident. The animal, upon being vio-

lently disturbed would open its eyes momentarily, and perhaps raise the head slightly, only to lapse into the coma almost immediately.

Considering that in some manner 9C98 must be moved to the next camp the following day it was deemed advisable to aid in the recovery, as it was apparent he would be incapacitated for several days insofar as hiking was concerned. From the symptoms presented it was considered that stimulation was indicated. This was accomplished both orally and hypodermically at half hour intervals. Following the second administration of stimulants it was evident that the animal was more alert and even showed interest in prairie hay. Immediate and complete intestinal evacuation seemed important to eliminate further assimilation of the ingested grass. This was accomplished hypodermically. This feature was probably more important from the standpoint of the animal's condition on the following day than was the stimulation because of the temporary effect of the latter.

The condition of the animal ten hours after the initial feeding still presented a picture of depression but the hypnotic stage had almost completely disappeared. Early the following morning some depression was present and the animal was considered unsafe to ride. He was led and made the march in a satisfactory manner. Upon arrival at the next camp the animal was again offered "Sleepy Grass" for which he apparently had not lost his appetite. The grass was, however, withheld as it seemed to have been proven conclusively to all concerned that the effect on horses was anything but encouraging. The horse recovered without any bad after-effects.

With reference to United States Department of Agriculture Technical Bulletin No. 114, "Sleepy Grass" (*Stipa vaseyi*), is peculiar to only a certain section of the United States centering about Cloudcroft and Fort Stanton, New Mexico. Although the plant has been reported from Colorado south to Mexico and from Texas west to the San Francisco mountain of Arizona it is an extremely interesting fact that cases of poisoning have been reported only from the two aforementioned sections.

Feeding experiments conducted at the Salina Experiment Station near Salina, Utah, have demonstrated that the dried grass is as toxic as the green. The popular belief that this is not the case is probably due to the fact that the plant loses 63 per cent of its weight during the process of dessication and this loss of weight is not allowed for in the estimation. Chemical analyses have failed to reveal poisonous properties.

Inasmuch as the results of feeding *Stipa vaseyi* have shown that there is a profound respiratory and cardiac depressant action the importance of a knowledge of the plant itself rests not only in a mortality rate, which is negligible, but in the fact that the plant will incapacitate an animal for a period of one or more days.—*The Veterinary Bulletin*.

Camp Ord Stakes

During the period of active training at Camp Ord, adjacent to the Monterey Peninsula, the 11th Cavalry initiated the Camp Ord Stakes.

General Provisions: A course of approximately eight miles of varied terrain was covered by contestants—half mile dismounted, the remainder mounted; the winner determined by the minimum elapsed time to successfully complete the course.

Instructions issued to individual contestants were (see sketch):

START: Camp disposal plant, NE of Camp. Each contestant to carry a rifle and pistol (no ammunition). Each contestant to be numbered. Uniform: Campaign hat, O.D. shirt, breeches, and boots. Move dismounted to pistol range South of Camp.

PISTOL RANGE: Draw 5 rounds of pistol ammunition. Fire at bottle at your number. 15 yards. If bottle is broken, turn in extra ammunition and proceed. If the first 5 rounds is expended without breaking bottle, draw 5 more. Each extra round adds 5 seconds penalty. If bottle is not broken in 10 rounds a 5 minute penalty is added and contestant proceeds.

PICKET LINE: Saddle and bridle, taking a halter and shank. Be sure and get your correct horse. No assistance

to be rendered to contestant. Proceed to Camp Huffman mounted.

CAMP HUFFMAN: Draw 5 rounds of rifle ammunition and fire at bottle at your number. Same procedure as at pistol range. Range 75 yards. Proceed by trail across country to Impossible Canyon and check in.

IMPOSSIBLE CANYON: Check in at control station at 353. Proceed to Machine Gun Flats.

MACHINE GUN FLATS: Dismount at Red Flag and lead to control station. Any animal in distress will be eliminated. Proceed to Old Target Range north of 155. Take course of obstacles about 3' 6". (4 post and rail fences, two panels wide; a ditch and high bank; drop jump.) Contestants must pass between the flags on each obstacle. Proceed to Finish at pistol range South of Camp. Finish between the flags.

Contestants must finish with number, full equipment and proper horse.

INDIVIDUAL WINNERS

1st Place:	No. 45. Cpl. Jacobelli	30:49
2d Place:	No. 33. Cpl. Moseley	31:12
3d Place:	No. 4. Lt. Gillis	31:30
4th Place:	No. 27. Cpl. Schmitz	32:25

WINNING TROOPS

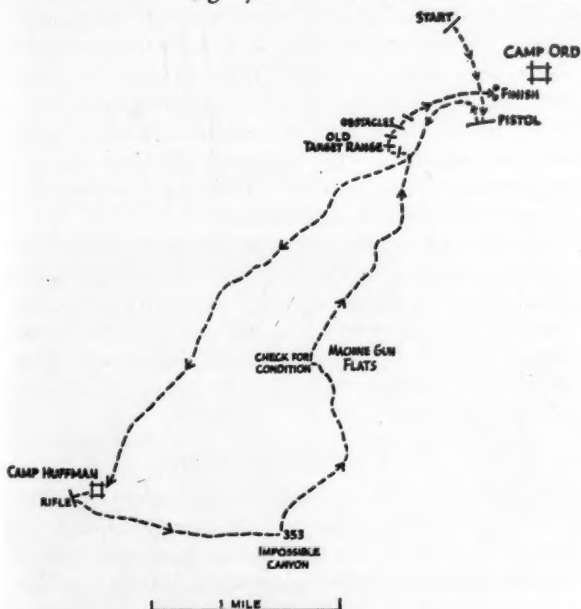
Total Time

1st Place:	Troop B, 11th Cavalry	2 Hrs., 15 Min., 49 Sec.
2d Place:	Troop F, 11th Cavalry	2 Hrs., 34 Min., 41 Sec.
3d Place:	MG Troop, 11th Cavalry	2 Hrs., 37 Min., 01 Sec.
4th Place:	Troop A, 11th Cavalry	2 Hrs., 37 Min., 09 Sec.

The committee which organized and supervised the event consisted of:

Major C. H. Gerhardt, Chairman,
Captain L. L. Judge,
Captain J. M. Callicutt,
Lieut. P. B. Griffith.

EDITOR'S NOTE: A contest such as the above is in every respect a military feature. It emphasizes the ability to rate the horse and to realize his powers and limitations. It brings out the need of skill with weapons and the transcending importance of personal physical condition under the rigors of actual campaign. Only the fit survive in war.



A COMMENDABLE ROAD MARCH

Extract of report to Headquarters 52d Cavalry Brigade, Brigadier General Edward J. Stackpole, Jr., Commanding, by Regimental Board, 103d Cavalry, consisting of Colonel Benjamin C. Jones, Major George W. Schubert, and Captain Foster S. McGhee.

Among the many hikes and road marches reported from all arms of the Pennsylvania National Guard during this pre-camp period, the most outstanding comes from Troop F, 103d Cavalry, Lock Haven, commanded by Captain Foster S. McGhee. Because of its magnitude and duration; time and study required in planning; problems met and solved, a review of the exercise is thought to have a definite training value.

The exercise included a road march of 65 miles from Lock Haven to Sunbury; participation in a two-day horse show at Sunbury and return; practicing road formations, patrols and simple technical exercises en route.

CONDITIONING OF MEN AND ANIMALS

The conditioning period extended over four weeks prior to the exercise and consisted of several hours of riding, each day or evening, over the mountainous trails in the vicinity of the Lock Haven Armory. Particular attention was given the backs, feet, feeding and gaits of animals, and the riding habits of the men. A supervised inspection of animals and adjustment of equipment was practiced as routine.

MARCH TABLES USED

A march schedule of road gaits was prepared covering the entire 65-mile route between Lock Haven and Sunbury, most of which is over mountainous country. A timekeeper and pace setter were used to carry out the schedule. A five-hour halt was planned at the Half-Way C.C.C. Camp, S-67, in the 14 Mile Narrows, approximately 32 miles from Lock Haven, or about half the distance of the total route of march.

DEPARTURE

The troop, represented by two officers and twenty-six enlisted men, left the Lock Haven Armory at 7:00 A.M., Sunday morning, May 22. Fourteen of the men were recruits, having enlisted since January 1, 1938. Many of the animals were remounts. The rate of march was scheduled to be 4½ miles an hour the first hour, 5½ each succeeding hour and 4 miles the last hour before halt. Brief leading periods marked the beginning and end of each hourly halt.

Due to the extremely rugged terrain through the mountains it was found that the march schedule for the first 32 miles could not be accurately kept without undue hardship. So, special attention was given to march discipline, gaits, watering where possible, and thorough inspection of horses and equipment at each halt. The result was that when the troop pulled into Half-Way Camp, al-

though a little behind schedule, both men and animals were in excellent condition. Daylight travel aided the march.

MID-WAY HALT

Half-Way Camp was reached at 2 P.M. Here, during the five-hour halt and rest period, the horses were inspected and groomed, the men fed and rested. Here also the troop was met and inspected by Lieutenant Colonel S. B. Wolfe, Executive Officer, and Major G. W. Schubert, Squadron Commander. A close inspection of horses revealed that one horse had picked up a nail in his foot. This was removed, the foot treated and the horse returned, by truck, to Lock Haven.

ON TO SUNBURY

The march was resumed at 7 P.M., Sunday evening, with the horses refreshed and the men in high spirits. The roads from this point to Sunbury were found to be worn-out macadam with high crowns and no berms, which together with the darkness, afforded very poor footing and consequently reduced gaits, mostly at a walk, which was very tiring to men and animals.

A rest period was decided on at the Armory of Troop E, 103d Cavalry, Lewisburg, which was reached at 11 P.M. Horses were unsaddled, groomed, watered, and fed hay. March was resumed at 4:00 A.M. and the troop arrived at the Armory of Troop C, in Sunbury, at 6:30 A.M., Monday morning, May 23. A close inspection of animals revealed them to be in excellent condition. Only one shoe had been lost, this in a car track while the troop was moving through Northumberland. There were no indications of sore backs, withers, or cinch sores.

At Sunbury, regular camp routine was followed. The horses taking part in the two-day horse show, Tuesday and Wednesday, showed no trace of fatigue from the march and the men were even better riders from the experience. The regimental commander, Colonel Benjamin C. Jones, inspected the horses at Sunbury and expressed gratification over their condition.

THE RETURN MARCH

The return march was started from Sunbury at 8 A.M., Thursday morning, May 26. The march schedule had been revised, based on a better understanding of road and terrain conditions, and aided by daylight and more level country during the early stages, was followed without change. Road formations, advance and rear guard action, and patrol problems were carried out during this period.

Lewisburg was reached by 10:15 A.M., and after the horses were watered, the march resumed. Soon after leaving Lewisburg, rain began to fall and continued without interruption throughout the balance of the return trip.

A HARD NIGHT

Half-Way Camp was reached by 2:00 o'clock in the afternoon, the horses again cared for and the men rested.

(Continued on page 364)

TRADITIONS OF THE CAVALRY



...AND HOW VARIOUS SAYINGS AND CUSTOMS ORIGINATED by WINDAS



• EXPLOITS • of MODERN CAVALRY



Zaragoza, Spain, Jan. 18th, 1938
Moroccan cavalry conquered the heights of Alto de Muelton, advanced to within a mile of Teruel; seized the loyalists' steel and concrete fortifications outside the city, leaving 3,000 enemy dead on the slopes.

• CHIVALRY •

The name for the nobility. It is derived from the old French word "Chavalrie" (cavalry). In the middle ages, when knights were mounted, and foot soldiers were peasants, it was but logical to associate cavalry with the elite.



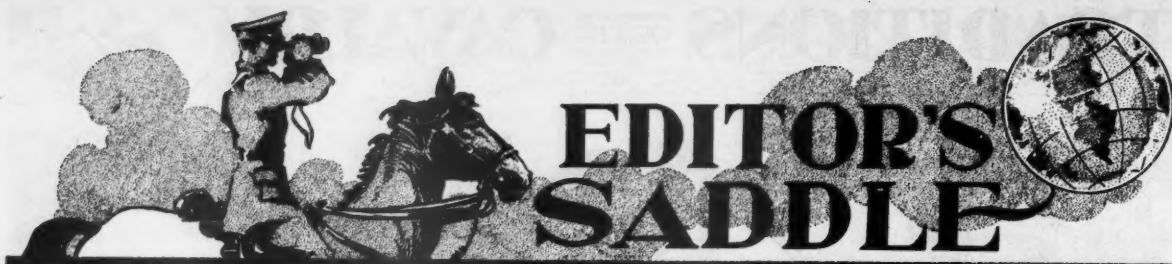
• SABER-RATTLING •

This political term, referring to warlike utterances against other nations, gets its meaning from the age-old custom of cavalry-men, who loosen their sabers in the sheaths, preparatory to a charge.



• HUZZARS •

Name of certain brilliantly uniformed regiments; it derives from two Hungarian words "Husz" (twenty) and "Ar" (pay) from an imperial Order that "every twentieth man of military age shall take to the field and shall be paid for his services."



Command

From the days of Caesar it has been common agreement that the two outstanding jobs in the military world are those of regimental and troop commander. It is often a mute question as to whether those whose good fortune it is to serve with troops appreciate that assignment. Successful command is an art, and like any art is perfected only by constant practice. It is the weeks and months spent on the drill field and in maneuvers that produce the delicate touch which inspires knowledge of correct formation, need for additional reconnaissance, courage to commit reserves, and the other score of factors which enter into victory or defeat. In our present day army, where command is the exception rather than the rule, it should be considered a most fortuitous opportunity. Every day on this duty should be entered in black ink on the ledger of a military career. When the clouds of war break into actual storm it is the commanders of troops, from platoons to armies, who preserve a nation's boundaries and integrity. It is true that the service of supply renders a most important function, but it is upon those commanders of combat troops that the safety of the nation depends. Bread and muskets do not breed the will to fight nor the initiative to close with the enemy. Those virtues lie hidden in the art of command—and that art is found in practice.

Local Terrain

A great number of army posts are situated where the surrounding terrain is of a distinctly local nature; to wit, the bondocks of Fort Bliss, the open rolling plains of Fort Riley and the long, severe winters of Forts Ethan Allen and Meade. Under these conditions it is not improbable that many who have participated in maneuvers thereabouts become habituated to a particular type of weather and terrain. After a tour of from two to four years under these conditions many are prone to associate all warfare as being waged on similar ground. Cavalrymen of the border country might visualize the operations of their arm as always occurring in dry, arid surroundings with little water and less cover and concealment. Frequently the widespread region of the United States east of the Mississippi River with existing woods and rivers is altogether overlooked as a potential area of campaign. To the thoughtful, tactical formations and matériel intended for war should be visualized from the angle of many types of terrain rather than one peculiar to a single locality. Under

these circumstances predisposition to predict failure or successful fulfillment might be materially altered. Three factors make war: your own forces, the enemy, and the terrain. Create and maintain an eye for ground.

Payment of Dues

The circulation desk of the CAVALRY JOURNAL several months ago initiated the project of inclosing with the JOURNAL a notice of expiration of subscription to individuals whose payment of membership expires with that issue. It has been encouraging to observe that the majority of members utilize that slip in notifying us of renewal of subscription and frequently forward dues for the ensuing year in the same envelope.

Membership in the Cavalry Association is roughly divided under two general headings; continuous and yearly. During past years, and to a less extent now, many individuals joined the Association for the period of one year only. It was the yearly subscriptions to the JOURNAL for which the expiration notices were largely intended. Prior to use of this yellow printed notice it was very difficult to determine whether members desired to continue membership or to cancel it upon expiration of the year covered by dues for that period. The use of this notice has been of great assistance in striking from our records the names of many who no longer desire membership in the Association. Others have been permitted to receive the JOURNAL over a considerable period prior to expressing their desire to drop from the Association or to continue membership.

In an effort to bring our list of memberships up to a clean-cut, current status, it has been decided to drop from membership all individuals who are over a year in arrears in payment of dues. It may be surprising to note that there were 240 individuals dropped under this plan involving a total amount receivable to the Association of \$860.00.

These comments are published in this column only for the purpose of encouraging the use of the expiration notices on the part of those who initially joined the Association on an annual rather than a continuous basis. Use of these notices would facilitate accurate records in this office and also afford considerable monetary savings in useless billings and mailing of the JOURNAL.

Coöperation in the field will be the source of much editorial appreciation.

The United States Cavalry Association

Organized November 9, 1885

DESIGN

1. *The aim and purpose of the Association shall be to disseminate knowledge of the military art and science, to promote the professional improvement of its members, and to preserve and foster the spirit, the traditions, and the solidarity of the Cavalry of the Army of the United States.*—ARTICLE III OF THE CONSTITUTION.

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Vice-President

BRIGADIER GENERAL HAMILTON S. HAWKINS, Retired.

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LIEUTENANT COLONEL WILLIAM NALLE, (Cavalry) General Staff.

LIEUTENANT COLONEL HENRY D. WHITFIELD, Cavalry-Reserve.

MAJOR HENRY P. AMES, 1317th Service Unit.

MEMBERSHIP

Membership shall be of three classes, which, together with the conditions of eligibility therefor, are as follows:

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- (2) Associate, for which all present and former commissioned, warrant, and noncommissioned officers of honorable record of the military or naval services of the United States not included in class 1 shall be eligible.
- (3) Honorary.

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NOTES from the



CHIEF of CAVALRY



Chief of Cavalry's Question?

"WHAT IS YOUR OPINION OF THE EXISTING ORGANIZATION AND ARMAMENT OF THE PRESENT CAVALRY (HORSE) REGIMENT AT PEACE STRENGTH? DO YOU CONSIDER PRESENT PLANS AND ARRANGEMENTS FOR TRANSITION FROM PEACE TO WAR STRENGTH ADEQUATE? IF NOT, WHAT CHANGES AND ADDITIONS DO YOU RECOMMEND?"

PLATE I.

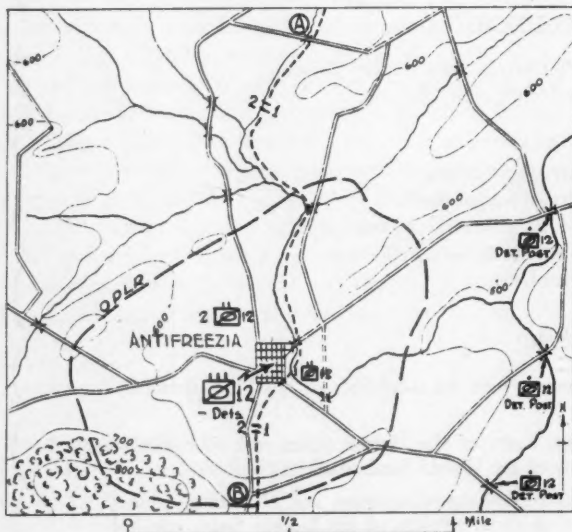
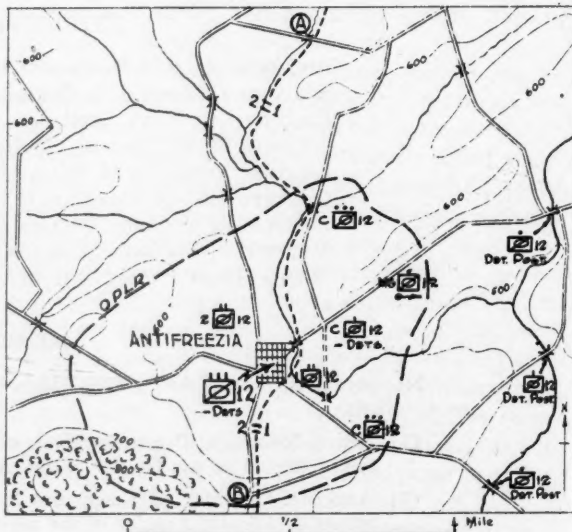


PLATE II.



What Would You Do?

EDITOR'S NOTE: The following letter was received from "Lieutenant Slinkovitch" whom you recall is on a three months' leave with permission to visit foreign shores. Personally, we thought it of no value and threw it in the waste basket. You should do the same.

12th Regt. Chassishoof
Philingstashun, Ugovania.
11 July, 1938.

Dear Ed.,

You are no doubt speechless as you read the heading of this letter. However, I am actually an observer attached to the 12th Regiment Chassishoof (Ugovanian for mechanized cavalry).

Much to my own surprise, I had no difficulty in entering the country due to the fact that when I showed my

visa (taken by the Post Exchange) they thought I was a native Ugovanian.

Upon arrival at Philingstashun I introduced myself to the C.O. (Colonel Turret) with the request that I remain for a week as observer. Unfortunately, I neglected to leave my riding crop back at the hotel and my breeches still retained that undeniable odor of a horse; so the Colonel's suspicions that I was an alien were aroused. He took the matter under advisement.

Later in the evening I attended the officers' hop and while dancing with Miss Ethill Gass (the Colonel's niece) I casually mentioned the fact that I drove a "motor syklet" (motorcycle). From then on, I was made. The Colonel took me in as a member of the 12th Chassishoof family.

A few days later, the regiment went on an overnight march. I was very much impressed with the exercise and will give you the situation exactly as it happened, with a crude sketch of the situation.

We left the post at 1:30 PM and marched north, in one column. At 6:30 PM, after covering about 125 miles, we arrived in the vicinity of Antifreezia where the Colonel decided to halt for the night. He assembled his officers and issued the following instructions, with frequent references to maps (which they all carried):

"Gentlemen: Inasmuch as this is purely a tactical exercise with the enemy outlined, I have assembled all of you to hear my instructions. Ordinarily I would have only the squadron and separate unit commanders.

We are now operating in enemy territory. Hostile mechanization has just been reported about fifty miles to the northwest moving in this direction. Our reconnaissance troop (Troop A) reports hostile armored cars have been encountered over the entire area from north to west. One squadron of hostile horse cavalry went into bivouac at 4:00 PM today twenty-five miles to our north.

We halt here for the night. Before I issue the outpost order, I want to tell you the tactical principles for the security of the bivouac area that govern my plan.

Due to the constant threat of hostile mechanization and motorized elements, all-around security is necessary.

When a command halts for the night, the commander must assign bivouac areas to units, designate the outpost line of resistance, and detail outpost troops. He may direct that certain vital terrain or points be held.

Bivouac areas for mechanized cavalry should provide:

- Hard standings and facilities for maintenance.
- Cover and concealment.
- Suitable and adequate routes of withdrawal.
- Material obstacles.

I am dividing the bivouac area into two sectors for the purpose of security. Boundary between squadrons: Stream at point A—point on road at B to 2d Squadron. The 1st Squadron will bivouac in and outpost the east sector, and the 2d Squadron will bivouac in and outpost the west sector. A squad from Machine-Gun Troop is attached to the 1st Squadron and a platoon (less one squad) and one squad rifle platoon Machine-Gun Troop are attached to the 2d Squadron." (See Plate 1.)

Colonel Turret concluded his order with instructions to the advance guard relative to march outpost, administrative details for the halt, detached posts, etc., which I will not include here.

The squadron commanders then assembled their officers and each assigned bivouac areas to the troops of his squadron. I accompanied Major S. Wrench of the 1st Squadron. He directed that Troop C, with one squad Machine-Gun Troop attached, form the outpost for the night for the 1st Squadron area.

Later on when the outpost was established I visited Troop C and observed the dispositions of the troop for the night.

Two platoons of Troop C were established on the outpost line of resistance at the main approaches to the bivouac. Vehicles were camouflaged and guns sited to fire on the principal avenues of approach. Dismounted men, armed with machine guns, sub-caliber .45, were

stationed as sentries from 50 to 100 yards away from the cars. (See Plate 2.)

Just before darkness shut in, I rode around with Colonel Turret as he inspected the outpost. During our conversation we discussed the changes necessary between an outpost of horse cavalry and mechanized cavalry.

"You see Lieutenant Slinkovitch," he stated, "after all, the same general principles still apply. However, there are a few changes necessary due to difference in armament, etc.

For instance:

During daylight, reconnaissance is *more* extended. At night, reconnaissance vehicles normally are serviced and personnel rests.

Detached posts, during daylight, are established well out, covering critical points or routes of probable enemy approach. During darkness, they are drawn in closer to the main body, the outpost line of resistance becoming the outer perimeter of the bivouac area.

At night, when in close proximity to the enemy, observation groups, detached posts, and elements of the command prepared to fire from their positions in the bivouac area, provide security for the command.

Every advantage is taken of terrain features favorable for protection and defense.

Antiaircraft protection is provided by having guns sited and ready to fire. Guns firing should be sited so that the bivouac area has all-around protection.

Captain Combat Carr places some of his vehicles on the line of resistance, the remainder bivouacking in the troop area where they can most readily support that line. This permits maximum rest for personnel and necessary servicing and maintenance. Cars are so located that guns can be fired from the vehicles, the caliber .50 gun covering roads, the caliber .30 laid to fire in defense of the position. Guns must fire on definite lines previously determined. Turrets should be clamped in place. One member of the crew should remain alerted in the turret of each vehicle at all times.

A member (or members) of the crew, armed with machine-gun sub-caliber .45 or machine-gun caliber .30 is (are) stationed at some distance from the vehicle to prevent infiltration by hostile individuals.

Machine-gun squads are sent in their vehicles to hold critical points. Vehicles are held under cover, with some guns dismounted and sited to fire on avenues of approach. Some of the riflemen are dismounted and sent forward to observe. A squad may hold two critical points which are within supporting distance of each other.

Prearranged signals must be prepared and understood between detached posts and elements on the outpost line of resistance in order to insure a safe withdrawal through the outpost line.

Every advantage should be taken of natural obstacles. Barriers and road blocks should be constructed from materials at hand. They should always be defended. Visiting patrols, within the bivouac areas, should take precautions to avoid giving away the location and disposition of the command.

Armored cars will probably arrive in the area at or after dark after a strenuous day. They will leave before or soon after daylight the following morning. The vehicles must be serviced and personnel rested during the night. They are used on outpost duty *only* when absolutely necessary."

My leave is about up and I am returning home tomorrow. I will regret to leave this grand country with its rolling terrain and small streams, the ideal for its mechanized cavalry. I have learned a lot; their principles are sound.

I am glad I didn't go to Spain or China. Vive la Ugovania and the 12th Chassishoof.

Yours,
"SLINKY."

1 1 1

Cavalry Leadership Test for 1939

The War Department has recently issued the directive covering the Cavalry Leadership Tests for 1939. This test was instituted in 1925 and is designed to promote the qualities of leadership essential to commanders of small units.

The tests this year will be held in the 3d Cavalry, less 1st Squadron, at Fort Myer, Virginia, the 1st Squadron 3d Cavalry at Fort Ethan Allen, Vermont, the 12th Cavalry, less 2d Squadron, at Fort Brown, and the 1st Squadron, 14th Cavalry, at Fort Sheridan, Illinois. Each of these organizations has been directed to conduct the competitions between platoons representing rifle troops of that organization between September 1st and November 30th of this year.

The winning platoon in each of the organizations listed will receive a suitable trophy and money prizes.

A Commendable Road March

(Continued from page 358)

With the departure of the troop at 7:00 P.M. for Lock Haven, the real test of the march began. It was entirely through mountainous country, some over forestry roads, and narrow trails. The night was black with hard rain. A two-hour rest period was taken at Carroll under shelter. The hourly inspection of horses and equipment was more tedious during this phase, but the men soon learned to use their hands as well as their eyes in making it.

All hands were glad to arrive at home station in Lock Haven at 4:00 A.M., Friday morning, concluding the six-day exercise. Horses were given a rub down and drying. The men, while tired, were in high spirits, and already planning another march prior to camp.

The exercise was exceedingly valuable from the standpoint of training for it brought into active play all essentials of planning, conditioning, and marching. It also demonstrated the willingness and ability of the enlisted personnel of National Guard troops to accomplish anything they set out to do.



Deadline for the Cavalry Journal

In order to insure early and timely publication of the CAVALRY JOURNAL it appears advisable to step up the deadline for each issue to the 10th of the month preceding appearance of that issue in the mails. As a bi-monthly periodical it is believed that the JOURNAL should be in the hands of its readers not later than the 10th of alternating months; that is, for the September-October issue, the JOURNAL should appear in the mail boxes not later than October 10th. Heretofore, the deadline for

the JOURNAL has been considered as of the 20th of alternate months. It is found that under this plan sufficient time is not always available to insure proper illustrations and other details necessary for final publication. It is, therefore, requested that material for all existing features of the JOURNAL such as "Organization Activities" be mailed sufficiently early to reach the editorial desk by the 10th of the month preceding date of publication: Deadline for September-October number—September 10th.

General Hawkins' Notes

The Question of Organization

The question of how to organize the different cavalry units, small and large, has plagued us all for some time. In fact, it has been unsatisfactory ever since the World War.

After much study and reflection, I have become convinced in certain ideas. I will attempt to give just a few of them, reserving more detailed figures and explanations for future articles.

The advent of so many different weapons and of new arms of the service, such as the air force and mechanized force, has led those officers working on organizational problems, to try to give us every new weapon that might seem necessary to meet new conditions of attack and defense. Simplicity has been lost. Complicated organization has followed. We have tried to arm our units with weapons to meet every possible contingency.

Although it is true that we must have new and improved weapons, it is not true that the smaller units from the regiment down must have all of them all the time.

Those weapons which are not always necessary in practically all kinds of combat should be organized into separate units so that they can be used when necessary and held back when they can be dispensed with. This is important enough to call it a principle.

A regiment of cavalry is a permanent organization of the smaller type. It may be said to be the point in organization where we should draw the line on weapons that are not always necessary. But if these weapons seem important enough, they should be organized in separate units and assigned to the brigade or the division. Then they can be used, separately, or attached to regiments when this appears to be absolutely necessary.

We now have the pistol, the rifle, the grenade, the light machine gun, the heavy cal. 30 machine gun, the 50 cal. machine gun, the 37-mm. gun, all advocated for the regiment. Think of the different kinds of ammunition that have to be distributed, and the complexity in organization and tactical handling of a unit that is small enough to be simple.

To use a favorite expression of mine, we bristle like a porcupine. And the porcupine, when his quills are all out to protect him from every direction at once, can scarcely move. He has lost his mobility, and we are losing the mobility of the cavalry regiment.

Consider the 50 cal. machine gun. This wonderful weapon seems to answer the question of defense against tanks. But is the cavalry regiment going to be opposed

always, and wherever it moves, by a formidable force of tanks? Cannot any formidable, or numerous force of tanks be predicted or foreseen when it is really to be expected?

The only precaution that seems necessary, when our information does not indicate large forces of tanks, is to be prepared for sudden encounter with a few tanks of a rapidly moving mechanized force. We can deal with them with three or four cal. 50 machine guns, and by rapid movement into ground that is difficult for machines. We do not need to carry along with the regiment, ordinarily, whole batteries of these very heavy guns and their very heavy ammunition. The regiment that I propose to recommend will have only five 50 cal. machine guns, and these will be carried in the five scout cars that I shall also recommend. They would be sufficient to defend the regiment against any unforeseen tanks that might be encountered. If the regiment is operating on terrain where scout cars carrying these guns cannot go, it has little to fear from hostile tanks.

These five 50 cal. guns can also be made available to attack by fire any hostile machine gun emplacements that cavalry is likely to move against.

Thus, we can eliminate the 37-mm. gun. This gun would, no doubt, be useful at times. But it is very heavy to carry, and so is its ammunition. The 50 cal. machine gun can do a good deal of its work.

In large cavalry units like brigades or divisions, 50 cal. guns, organized in troops and squadrons, should be an organic part of the unit. But, except as indicated for scout cars, none should be in the regiment. 37-mm. guns, or an improved type of these guns could also be organized in batteries belonging to the brigade.

It must be remembered also that the more we have of these weapons, with the enormous number of men necessary to handle them and feed ammunition to them, the less the proportion of riflemen in the regiment is going to be. After all, these weapons are to support the riflemen so that they can get to close quarters with the enemy. And, if we have so many men serving machine guns that the number of riflemen in the regiment is thereby reduced too much, there are not enough of them to handle the enemy when they do get to close quarters with him, and the riflemen are simply assisted to go to their own destruction.

In other words, the proper proportion of riflemen to non-riflemen in a regiment is very important. Even for purely

defensive purposes the proportion of machine guns can be too great.

For the regiment, the heavy 30 cal. guns are the most important machine guns we have. The light machine guns have their merits, but they are not useful enough to replace a portion of the heavies nor to consume the number of men necessary to serve them at the expense of the number of riflemen.

The heavy 30 cal. machine guns are very mobile in pack, and can be used for almost any purpose that other machine guns are designed for. For a regiment containing between seven and eight hundred effective riflemen actually available for the combat, about sixteen heavy cal. 30 machine guns can be employed usefully. But no more, unless we include the weapon in the scout cars.

Machine guns for arming supply trucks or for other purely defensive purposes are not considered in this discussion.

I have shown in other articles why machine guns should be posted in groups separated from the riflemen. Therefore, I would organize sixteen heavy cal. 30 machine guns into a squadron of two troops to have two platoons of four guns each. And, except in the scout cars, that is all the machine guns I would have in the regiment. And this figure, sixteen, is based on the assumption that we have three squadrons of riflemen of three troops of three platoons each. If we have the regiment contain less riflemen than thus indicated, we should have less machine guns.

But this number of riflemen available for the attack is about the correct number for the regiment. It gives the best tactical organization. Counting overhead, it would give us a regiment of about 1,360 men and 68 officers, everything included.

Such a regiment acting alone could not oppose a regiment of mechanized cavalry if the latter has all its combat cars in action. But a brigade of cavalry could oppose successfully a brigade of mechanized force, because the brigade will have anti-tank guns as an organic part of it.

On the other hand, such a regiment would be far more mobile than a regiment with a lot of 50 cal. machine guns, and could attack other troops far better than the regiment with an undue proportion of machine guns. It could, also, engage other troops far better than a regiment of mechanized force could, because these other troops, say infantry, will have anti-tank guns to oppose the mechanized regiment. These anti-tank guns would not help such an enemy materially against our regiment as advocated.

If the regiment advocated was sent out expecting to meet a strong mechanized force, the brigade commander could attach to it the adequate unit of 50 cal. guns.

We cannot have our small cavalry units hampered by too many machine guns. If they are going to fight mechanized force, then it is a different matter, and small anti-tank units would have to be attached to every regiment. But this would be only temporary.

If a regiment of cavalry is acting alone, without having 50 cal. guns and it comes unexpectedly upon mechanized force, it still has its five anti-tank guns in its scout cars. And if that is not enough, it relies upon its cross-country mobility to refuse combat and withdraw. That ability is its great safeguard; cross-country mobility.

Situations arise often where a force of cavalry without artillery can make no progress and must withdraw. But this does not mean that every regiment must have a section of field artillery as an organic part of it.

The 50 cal. machine guns belong to the brigade, not to the regiment. In time of peace, 50 cal. machine gun platoons could be attached to regiments so as to keep everyone familiar with them and have them available for use in minor operations, if necessary. This would require no more men than having them assigned as an organic part of the regiment.

Further discussion of the proposed regiment, with figures, will be the subject of another article.



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The Cavalry School Digest of Information

The Use of Amateur Radio for Training Cavalry Communications Personnel

Prepared by First Lieutenant R. W. Porter, Jr.,
9th Cavalry

Amateur radio made its appearance soon after Marconi proved by his first experiments that telegraph messages could be sent between distant points without wires. The first amateurs consisted of those curious individuals who built home made sets and communicated with their friends, probably five miles distant. Early equipment bore little resemblance to radio equipment as we know it today. The range of those transmitting and receiving sets was very limited; break downs were frequent. Yet by 1917 there were 4,000 amateurs. With our entry into the war amateur radio stations were dismantled and three fourths of the amateurs were serving with the armed forces of the United States either as operators or instructors. Since the war there has been much technical development and the number of federally licensed amateurs has almost reached the 50,000 mark.

Amateur radio operators are banded together in the American Radio Relay League. The league is non-commercial, has no stockholders and is organized to represent the amateur in legislative matters. It is pledged to promote interest in two-way amateur communications and experimentation, is interested in the relaying of messages by amateur radio, is concerned with the advancement of the radio art, and owns and publishes the magazine QST. QST goes to all members each month as a monthly bulletin showing league activities. It serves as a medium for the exchange of ideas and keeps the amateur acquainted with new developments in the radio art. Profits from this magazine are used to support league activities.

Dr. Raymond V. Bowers of Yale University has summed up amateur radio as: "Amateur radio is the means of communication with others on equal terms, of finding friendship, adventure and prestige while seated at one's own fireside. In picking his human contacts out of the air the amateur is not seen by them. He is not known by the clothes he wears but by the signal he sends. He enters a new world whose qualifications for success are in his reach. There are no century-old class-prejudices to impede his progress. He enters a thoroughly democratic world where he rises or falls by his own efforts. When he is W9XYZ, a beginner, the radio elders help him willingly, and when he becomes W0XYZ, the record breaker and efficient traffic handler, he willingly helps the younger generation. Without pedigree, a chauffeur, or an old master decorating his living room, he can become a

prince—on the air. At the close of a day filled with the monotonous routine of the machine age, he can find adventure, vicarious travel, prestige and friendship by throwing in the switch and pounding his signals into the air."

Generally amateurs arrange to work with a few other amateurs at set times. They accept non-commercial messages from their community and relay the messages from one station to another until the messages reach their destination. Such service is free; its purpose to improve traffic handling technique. They carry on experimental work and "chat."

The Government encourages amateur radio for its general value to the public and its remarkable value as an emergency means of communications. The Army and Navy also thoroughly appreciate the value of amateur radio for the trained operators for a major emergency will be recruited from the amateur ranks. The Army, Navy and the American Radio Relay League coöperating together have organized the Naval Radio Reserve and the Army Amateur Radio Net. The Naval Reserve gives amateurs active training in radio aboard ship while the Army Amateur Net provides contacts for the amateur and his station throughout the entire year.

The Army Amateur Nets consist of groups of stations which work together at least once a week and are so organized as to furnish coöordinated assistance in case of floods and other disasters. In addition Red Cross offices are now furnished with lists of organized Army Amateur Nets as well as the names of local amateurs who are willing to help in an emergency.

In nearly one hundred storm and flood emergencies throughout the United States since 1913 amateur radio has been the principal and often the only means of outside communication. The Ohio Valley Flood of January, 1937, is one of the recent and most noteworthy examples of the value of amateur radio in an emergency. For a considerable period of time amateurs not only furnished the only means of communication from many flooded communities to the outside world, but they also aided in rescue work and in the direction of relief operations. Since amateur radio can be of so much value to the nation, should not each Army Post, or better, each Regiment operate an amateur station and an official relay station for some amateur trunk line or net?

Amateur radio, however, can do more than serve the nation in an emergency. It furnishes an excellent aid to the training of the communications platoon in garrison, for it adds interest to the work of experienced operators

and is an excellent means of seasoning inexperienced personnel.

How is this accomplished?

One of the biggest problems of a communications officer is to keep up interest in code practice. Hour after hour of work at a code table or in a radio net, with sets scattered around the post, soon kills any interest there may be in code practice and radio procedure. But when it is possible to contact and carry out a schedule with an amateur several states away, the code assumes new importance, for it is the medium through which new and interesting contacts have been made. Consequently, amateurs work far into the night communicating with some station many miles away.

Additional training is offered through station membership in the Army Amateur Radio System (AARS), sponsored by the Signal Corps. State and District nets are organized in each Corps Area and weekly net drills are held. Competitions are sponsored and amateurs are encouraged in all phases of their work. The AARS gives the operating personnel experience in cryptanalysis or "code busting," handling of traffic, fast speed reception and transmission as well as net discipline and station operation and maintenance.

Since military personnel is not encouraged to make major repairs or tamper with tactical radio sets, Amateur Radio offers an outlet for those men interested in radio theory and set building. To become a licensed Amateur it is necessary to know the International Morse Code and to have a knowledge of elementary radio physics. There are various classes of licenses issued by the Federal Communications Commission. Each type of license specifies the qualifications of the licensee as determined by a written examination. Study for these qualifying examinations is

an excellent method of teaching the Communications Platoon simple radio theory and as a reward for the mastery of these lessons there is the Amateur license.

The existing Federal Communications Law is so framed that an amateur station license can be easily obtained by the Communications Officer, and the personnel of the platoon, by passing a written examination sent to them by mail, can become licensed operators. When a station license has been granted and operators are qualified, a new means of training becomes available and the radio station becomes an asset to the regiment and to the community.

Considering its value to the regiment, an amateur station is not costly. The most expensive item is a good commercial receiver, which costs about one hundred dollars. The transmitter can be built by the platoon, giving practical instruction in set building, soldering and set designs. As money becomes available a simple amplifier unit can be added to the transmitter to give more power and hence more range. This set building does much to improve the technique of the platoon members without encouraging them to tamper with tactical radio sets. An excellent low power amateur station can be built for less than two hundred fifty dollars.

Amateur radio offers an excellent means of giving communications personnel practice in "sending" and "receiving"; it will add new interest and a new meaning to communication practice and theory; and in addition, it furnishes the community a tried means of emergency communication.

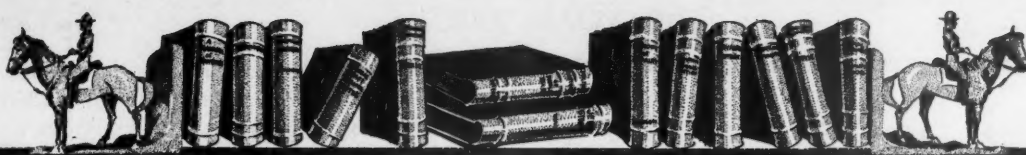
Anyone interested in Amateur Radio can obtain additional information by writing to the Department of Weapons and Matériel, The Cavalry School, Fort Riley, Kansas.



R.O.T.C. Text Books

Through its book department the Cavalry Association is in a position to meet the terms of any publication or agency in quoting prices on R.O.T.C. text books. Sales from this source have proven a very beneficial factor in meeting the budgetary requirements of the Association.

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BOOK REVIEWS

AMERICA GOES TO WAR, by Charles Callan Tansill. Boston: Little, Brown & Company, 1938. 730 pages; \$5.00.

Here is a volume that overshadows all previous studies on the background of America's entrance into the Great War. It is a ponderous affair of 700-odd pages heavily balanced with footnotes and studded with quotations from documentary sources. Dr. Tansill, former lecturer at Johns Hopkins University, former adviser to the Senate Committee on Foreign Relations, and former professor of history at American University, spent ten years in research for this study. He has examined a mass of American papers and German documents heretofore not available to researchers.

The whole effect of this massive volume is to alter the commonly held views of Bryan, Lansing, and Colonel House. Dr. Tansill's exploration of the records leaves him with a fine appreciation of Mr. Bryan's wisdom and humanity. He finds Colonel House flitting from the field of high finance to that of international law with equal ease and with a marked tendency to see the Allied point of view on all questions. Mr. Lansing's knowledge of the nice points of international law and his legalistic mind led him to make an effective lawyer's case against Germany. He, rather than Mr. Bryan, led the president.

The wartime diplomatic corps in Washington pass in review, and their portraits by Dr. Tansill have the hard unflattering character of a passport photo. The British ambassador, Sir Cecil Spring-Rice, often studiously insulting to Americans, is shown to have an ungovernable temper. M. Jules Jusserand, the French ambassador, was equally undiplomatic and unrestrained in his tirades against American attitudes. Strange to say, Count Bernstorff, the German ambassador, appears in the most favorable light as a discreet, courteous, and broadminded diplomat whose sound advice *Wilhelmstrasse* saw fit to ignore. The ramifications of the Boy-Ed, von Papen, Dumba activities are clearly set forth in a perspective which diminishes their importance.

Several chapters are devoted to American trade with Allied countries, and statistics concerning this trade and American loans to foreign countries during the war are set down in appendices. Some of Dr. Tansill's sharpest indictments are drawn against the British practice regarding American rights. He shows that in his protests to the British, "Secretary Lansing's language was studiously deceptive," deluding his countrymen into thinking that Lansing was insisting upon full protection of American rights while giving the British admiralty lawyers plenty of legal-loop-holes for escape.

The written style of Dr. Tansill cannot be described as brilliant, but the orderly march of his paragraphs and chapters is like the pitiless advance of an overwhelming and victorious army.
H. A. D.

JAPAN IN TRANSITION. By Emil Lederer and Emy Lederer-Seidler. New Haven: Yale University Press. 260 pages; \$3.00.

An evaluation of this book for general reading is difficult. Granted that it is scholarly, at times the scholarship overshadows interest and the book drags unnecessarily. At other times, its colorful paragraphs swing along at a lively and appealing clip.

The early chapters are more a comparison of Chinese and Japanese language, philosophy, and customs than a description of a changing Japan. About midway the reader is likely to wonder just what the authors are driving at and where this "transition" stuff comes in. Then in the final—and excellent—chapters, the loose ends are all skillfully gathered up in a splendid summation of the problems and potentialities of modern Japan.

The tremendous psychological gulf between East and West is shown in great detail. There is an interesting study of Oriental languages, portraying the fathomless differences between Oriental thought processes and our own. Perhaps the best analysis is the chapter on the Japanese state, which shows the unbalanced psychological situation caused by the clash of eastern and western elements in Japanese civilization. Here we find a basic insight to Japanese character—a factor too often forgotten in considering the Far Eastern scene.

Professor Lederer served for two years at the Imperial University of Tokyo, where he made the preliminary studies for this book. That he admires much of Japanese life and is critically interested in all of it is obvious. His effort has not been wasted. The book is a useful addition to the literature on the Far East.
J. W. R.

MACHINE GUNS. THEIR HISTORY AND TACTICAL EMPLOYMENT (Being Also a History of the Machine Gun Corps), By Colonel Graham Seton Hutchison, DSO, MC. London: Macmillan & Company, 1938. 338 pages; illustrated; index, \$4.50.

General J. F. C. Fuller once aptly called the machine gun a "nerveless weapon." Its invention and perfection thrust into the hands of the infantryman a tireless instrument whose accuracy was not affected by the fatigue of the operator. It offered possibilities that the military profession has been slow indeed to exploit. All officers will be the wiser for reading this important recent British pub-



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THE CAVALRY JOURNAL

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lication. Although the book costs a stiff price, the iron men will be as bread-cast-upon-the-waters if the full implications of the book are grasped.

From the very outset the machine gun was misused on a grand scale. In 1870-1871 the French put their Montigny *Mitrailleuse* batteries with their artillery and considered them as guns. They took a beating trying to swap metal with Krupp field guns. Their farcical performance in this rôle discredited the machine gun for years. In a similar manner the British used their Gardiner and Gatling guns as artillery, even though the Royal Navy tried to point out lessons drawn from their own operations along the Nile. Only by accident did the Russians during the Khiva campaign employ their Gorloff guns properly to stop a thundering herd of Turcoman cavalry dead in their tracks. This minor triumph was forgotten during the Manchurian campaign of 1904-1905 where, except at Port Arthur, they used their Maxims with the least possible skill.

The machine gun is in a large measure an American weapon. Gatling, Maxim, and Browning were among the most famous of its inventors. We demonstrated in 1918 that, once tooled up, we could produce an embarrassing number of machine guns, even if the water-jackets did leak! It was an American officer, Lieutenant J. H. Parker of the 13th Infantry, who was among the first to foresee the full potentialities of this deadly weapon. Back in 1899, after some rather strange fighting at Santiago, he wrote a series of books on the proper use of the machine gun. First, he insisted that they should not be confused with artillery. Second, he urged their offensive possibilities. Third, he advocated the formation of independent, highly-trained machine-gun companies to make full use of the weapon. This service in his opinion called for the greatest possible individual initiative, rugged courage, and spirit.

Until 1917 it was customary for the British and French armies to stick their machine guns in the front lines where they were subjected to hostile artillery fire. For the most part they were in a *thin* line. Once broken this line could be turned and the machine guns taken in reverse. The tremendous defensive powers of machine guns deployed in depth came as a sad surprise to the British on the Somme in 1916. Although the Germans were past masters of the use of the heavy machine gun in defense, and made things insufferably difficult for the Allied brass hats with their skillful use of light machine guns during their infiltration attacks of 1918, they never properly understood the use of long-range indirect machine gun fire for offensive purposes.

Back in 1903 Colonel C. B. Mayne, R.E., advocated the use of long-range indirect fire for machine guns in offensive movements. But his lecture before the United Service Institution and his book, *The Infantry Weapon and its Use in War*, apparently bore little fruit. The defensive-artillery concept of the machine gun persisted until 1917 when the British Machine-Gun Corps began to employ its guns in long-range indirect fire. "Regular" officers scoffed at "this studious firing into the blue," but

repeated successes were attained. With the compilation of accurate fire data the long-range machine-gun barrage became a reality. Infantry liked to hear the protective crackle of its own machine-gun barrage, but feared their own artillery barrages like grim death.

A study of Colonel Hutchison's volume and the recently published volume of the British official history, *Military Operations: France and Belgium, 1918*, Volume II, makes it clear that the failure of the British Fifth Army to employ its machine guns in depth and the decision in other cases to retreat before such defensive measures were utilized had a great deal to do with its defeat. General Gough (with all his virtues) never understood the proper use of machine guns.

The full power of machine guns to stop the powerful thrust of overwhelming forces was demonstrated by a machine-gun battalion of the British 33d Division at Hoegenacker Ridge (April 12-18, 1918). Here the machine-gun commander was afforded complete control of the area, and with guns arranged in depth for indirect and supporting fire, with adequate signalling provisions made in advance, with plenty of ammunition for sustained firing, his battalion was the prime obstacle to the advance of nearly seven German divisions. The effectiveness of the machine gun depends, like that of any other weapon, on the way it is handled. H. A. D.

HISTORY OF THE BOMBAY ARMY. By Sir Patrick Cadell, C.S.I., C.I.E., V.D. New York: Longmans, Green & Company. 362 Pages. \$7.50.

To write an appreciation of this book, into which a tremendous amount of labor and research have gone, the reviewer needs a thorough background of Indian history, which the present reviewer does not have. At the same time, no man can read its pages without realizing, however dull the catalog of organization and command may become at times, that Sir Patrick Cadell has made a solid contribution to the military history of India.

Most American military readers are aware that the Indian Army has had a long and honorable history with the one main exception of the Great Mutiny near the middle of the last century. This new volume recounts the development through the course of three centuries of one of the three main subdivisions of the Indian forces, the Bombay Army, as distinguished from the Bengal Army and the Coast or Madras Army, which have been treated fully by other historians. The Bombay Army, incidentally, was almost untouched by the mutiny of 1852.

Judging from the later chapters dealing with the Indian Army in the World War, of which this reviewer has some basis from other sources for criticism, it must be said that Sir Patrick has written an unusually frank history. He does not gloss over, as is so often done in works of this kind, the errors of high command or the weaknesses of specific units in battle or campaign. When they did well, he says so; but when they gumbled the works he also says so. Certainly in this respect Sir Patrick is an admirable model for military historians to follow. J. I. G.



Books for the Horseman

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Meade, Stephen J., 2d Lieutenant, 123d Cavalry, Kentucky National Guard
Nichols, Richard M., 1st Lieutenant, 109th Cavalry, Tennessee National Guard
Orell, George S., 1st Lieutenant, Cavalry-Reserve
Parsons, Leslie H., 2d Lieutenant, 115th Cavalry, Wyoming National Guard
Rice, Allen F., Captain, Cavalry-Reserve
Riordan, Forrest H., Jr., 1st Lieutenant, Cavalry-Reserve
Schulz, Robert P., 1st Lieutenant, 105th Cavalry, Wisconsin National Guard
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Tubbs, Marshall A., 6824373, Sergeant, Headquarters Battery and Combat Train, 1st Battalion, 84th Field Artillery



ORGANIZATION ACTIVITIES

1st Cavalry—Ft. Knox, Ky.

COLONEL ADNA R. CHAFFEE, *Commanding*

The 1st Cavalry is believed to have broken all records for the number of hours of duty for a regiment in garrison, during the past four months. Besides numerous tactical demonstrations and ceremonies, both mounted and dismounted, for distinguished visitors, O.R.C., R.O.T.C., etc., it has held each week a tactical problem, operating against the 13th Cavalry. These problems have been most instructive and all officers have been given an opportunity to discuss the exercise at the critique held the following day.

The following Officers have been lost to the Regiment during the past two months:

Colonel Bruce Palmer to the 62nd Cavalry Division as Chief of Staff.

Lieutenant Colonel Willis D. Crittenberger to the office of Chief of Cavalry.

Major Erle F. Cress to the War College.

Major Carl J. Rohsenberger to the Command and General Staff School.

Major Rossiter H. Garity to the O.R.C., Illinois University.

Captain Hayden A. Sears to the Cavalry School as Instructor.

Captain James K. Mitchell to the 3rd Cavalry, Ft. Ethan Allen.

1st Lieutenant Carroll H. Prunty to the Remount Service, Ft. Reno.

Gains:

Colonel Adna R. Chaffee.

Lieutenant Colonel Kenna G. Eastham.

Major Charles H. Unger.

Major Stephen Boon, Jr.

1st Lieutenant Edwin M. Cahill.

1st Lieutenant Charles E. Laydecker.

Upsets and last inning rallies featured the close of the Regimental Baseball competition, with Troop "A" winning the trophy.

Practically every officer and lady of the garrison attended the Despedida given in honor of Colonel Palmer prior to his departure for his new station. Colonel and Mrs. Palmer were the recipients of many tokens of esteem from the regiment.

The departure of Colonel Palmer, one of the outstanding Cavalrymen of the service is a great loss to the regiment. Colonel Palmer is dearly loved and admired by

every officer and man of this organization. We all wish him the very best that life has to offer. "Colonel Palmer We Salute You."

1 1 1

3d Cavalry (less 1st Squadron)—Fort Myer, Va.

COLONEL J. M. WAINWRIGHT, *Commanding*

ORC, ROTC, and CMTC camps have been the major activity for the past two months with Major Catesby apC. Jones, Captain Basil G. Thayer and 1st Lieutenant Powhatan M. Morton attached for varying periods to assist with the instruction.

The Second Squadron, commanded by Major A. W. Roffe, with a detachment of Headquarters Troop, commanded by 1st Lieutenant B. S. Cook, and the Band returned from Gettysburg, Pennsylvania, on July 8th, after having participated in the 75th Anniversary Celebration. With the exception of one rainy day the weather was good and both men and horses returned in fine condition.

Ninety-eight remounts have been received recently, forty from Fort Robinson and fifty-eight from Front Royal. Their training and conditioning has progressed rapidly and all will be ready for full duty early in August.

The new construction at Fort Myer is under way and will include much needed enlargement of barracks and an addition to the Post Hospital.

The Fort Myer Horse Show Team closed a successful season at West Point, New York, where they won five firsts, three seconds, three thirds, five fourths, and a reserve championship. *Billy Doo* owned and ridden by Captain Luebberrmann, and *Clipped Wings* ridden by Major Roffe won four ribbons each.

The Third Cavalry Polo Squad opened the outdoor season in May with Round Robin matches with the War Department and the 16th Field Artillery teams. Play continued through the month of June with matches with the 110th Field Artillery at Pikesville, Maryland, the Maryland Polo Club at Stevenson, Maryland, and the Fauquier-Loudoun Polo Club at Marshall, Virginia, and Middleburg, Virginia. The Southeastern Circuit Tournament is being held this year in Washington. Eight clubs have entered teams for the tournament. The first matches were held July 17th, with the 3d Cavalry winning its first match with the 110th Field Artillery by a score of 14 goals to 8 goals, allowing the Field Artillery team five goals by handicap. Several new ponies have been added to the string this year and put into play. A few green ponies have been selected for the squad and will, by next season, be ready for tournament play.

6th Cavalry—Fort Oglethorpe, Georgia

COLONEL GEORGE DILLMAN, *Commanding*

During the last week in May the Regiment went to Fort McClellan for its annual period of combat firing. Due to the excellent facilities available at that post and to the fine coöperation rendered by the Commanding Officer and personnel of Fort McClellan the Sixth Cavalry was able to conduct a very varied and complete program which involved anti-aircraft firing, combat problems for small units, firing at moving targets, problems for all types of machine guns, 37 mm. firing at tanks, and Scout Car problems. An experimental mount for light machine guns, developed by Captain H. F. T. Hoffman and Sergeant John Donovits of Troop F, and which permits fire from a defiladed position and at airplanes, was tested with very gratifying results.

June and July have been devoted to the conduct of Summer Camps for 860 CMTC trainees, 26 newly commissioned members of the ORC and 48 ROTC trainees. Coincident with summer camps the Regiment has conducted its pistol marksmanship and preparations for the Third Army Maneuvers which will take place in De Soto National Forest, Mississippi July 29-August 14. In these maneuvers the Sixth Cavalry will be attached to the 30th Division which has a mission of opposing the invasion of a Brown Corps which has landed on the Gulf Coast. Horses and heavy impedimenta are to be shipped by rail to Mississippi while personnel will go by motor truck.

PERSONNEL

Major William K. Harrison joined the Regiment on June 30th, having come from the War College.

Eleven Thomason Act officers have been allotted the Regiment for training during the current year.

Second Lieutenant Elwin T. Knight of last year's group recently received his regular army commission and we are happy to welcome him to the Regiment.

Major Milton H. Patton is under orders to go to Charleston, W. Va., on duty with the Organized Reserves, 1st Lieutenant Hamilton H. Howze goes to the Philippines on the September 9th transport from New York, and 1st Lieutenant John F. Franklin goes to the Cavalry School in September. The Regiment will be very sorry indeed to lose them. Major Patton has served two tours of duty with the Sixth Cavalry. The departure of Lieutenants Howze and Franklin will leave holes in the regimental polo team which will be very hard to fill. These three officers will leave in August after the Regiment returns from the Third Army Maneuvers.

First Sergeant Sam Barbee, Troop A, and First Sergeant Charles B. Misner, Troop E, retire on July 31st. The good wishes of the Regiment go with them.

ATHLETICS

Due to the contemplated departure of the Sixth Cavalry on maneuvers, it was necessary to curtail the Regimental baseball league. Troops B, F, HQ and A are now involved in the semi-final play off under the Shaughnessy

System, these teams having finished in the order indicated. Final games of the series will be started on Tuesday, July 19, 1938.

A Regimental soft ball league was inaugurated this year and has taken hold very forcibly. Great interest is being shown in this branch of sport and it is contemplated making soft ball one of the major sports for coming years. Although the schedule of games was half completed the Medical Department was permitted to enter a team in the league and is now fighting it out with the leading teams. Troop B, Machine Gun Troop and Medical Detachment are leading at present.

7th Cavalry—Fort Bliss, Texas

LIEUTENANT COLONEL HARDING POLK, *Commanding*

On May 17th the regiment returned to Fort Bliss from the maneuver area near Balmorhea, Texas, where it engaged in test for the proposed cavalry division. Men and animals returned in splendid condition and, after a few days spent in inspecting and cleaning up, the work on preliminary rifle and pistol marksmanship was started. The regiment left for Dona Ana Target range for its annual range practice on June 27th and will return to Fort Bliss, Texas on July 23d.

While in the maneuvering area the regimental officers' Mess had the honor of entertaining the Chief of Cavalry at dinner. Fortunately for us it turned out to be a rather calm evening so the dust was not bothersome on this important occasion.

Lieutenant Streeter became the father of a daughter on March 29, 1938.

Baseball has had a slow start this year due to numerous causes and practically nothing has been done so far. Conditions were such that only soft ball could be played in the maneuver area. The younger officers of the regiment made up a soft ball team which, under the masterly pitching of Lieutenant Boyle, defeated all officers' teams sent against them.

While the regiment was away on maneuvers, we received sixty remounts and these, together with those on hand before our departure, give us about one hundred remounts under training. This training is going ahead in spite of the annual target practice, and it is expected that some of these horses will be ready for duty during the Third Army Maneuvers scheduled for the middle of August.

Organization Day was celebrated on June 25th with a special parade to the colors and an informal horseshow in the morning. A picnic was held for the entire regiment and guests in Garry Owen Field in the evening. During the parade, while those men received since last Organization Day, paraded past the colors, the new Seventh Cavalry March was played. This march, which embodies the tunes of the famous regimental song "Garry Owen," was composed by Tech. Segt. Franz Koschnicke, Band, Seventh Cavalry.

Horseshow activities have been taken over by Captain Bixel, while polo activities are now under the supervision of Major Haydon. Polo is now being played every Wednesday and Sunday with either the 8th Cavalry, the 82nd Field Artillery, or El Valle. The very successful organization day horseshow was the first to be held under the new director and its results point to another successful year.

Regimental losses since last notes: Captain Yale and Captain Howze, to C. & G. School, Fort Leavenworth. Lieutenant Van Nostrand to Cavalry School. Major Dunkle to Ohio N. G., Cincinnati, Ohio. Major Williamson to Hq. 1st Cav. Div.

Gains: Captain Finnegan from Fort Riley.

1 1 1

11th Cavalry—Presidio of Monterey, California

COLONEL HOMER M. GRONINGER, *Commanding*

Colonel Homer M. Groninger, known familiarly by his contemporaries as "Cy," arrived on the transport *Republic* on June 28 to assume command of the Presidio of Monterey and the 11th Cavalry. Colonel Groninger arrived during the height of the Civilian Component Camps finding four hundred ROTC Students undergoing training at the Presidio, thirteen hundred CMTC Students arriving and orders issued calling for the arrival of over a thousand Reserve Officers for the ORC Camp. The officers and ladies of the garrison, as well as officers from other posts and stations on summer camp duty at the Presidio, tendered a reception followed by a dinner dance to Colonel and Mrs. Groninger, at the Officers' Club on July 1.

Independence Day was appropriately celebrated on the Peninsula by joint participation of the Army and Navy with local civic and patriotic organizations on July 4. The U.S.S. *Ranger*, aircraft carrier, arrived in Monterey Bay on July 2 to contribute to the color and gaiety of the celebration. The U.S.S. *Ranger* is commanded by Captain John S. McCain, U.S.N. and is the flagship of Admiral E. J. King, who was on board. Courtesy calls were exchanged between the Admiral, accompanied by Captain McCain, and Colonel Groninger shortly after the *Ranger* dropped anchor in the harbor. During the visit of the *Ranger* the officers and ladies of the garrison entertained the officers of the ship with rides through the Del Monte Forest while enlisted men of the garrison served as hosts for the sailors on board. A ride through the Del Monte Forest a baseball game and an enlisted men's dance with over 900 present furnished the highlights. The baseball game, between the crew of the *Ranger* and the garrison team, resulted in a victory for the Presidio Team. The officers of the *Ranger* were entertained, by the civil communities of the Peninsula, on the local golf clubs and at the Del Monte Hotel. Admiral King entertained on board the *Ranger* with a tea for officers and ladies of the garrison and invited civil guests from the Peninsula communities.

On July 4th a colorful parade marched through the historic streets of Monterey. Troops of the garrison, de-

tachments of sailors and marines from the *Ranger* and numerous civic and patriotic organizations contributed to the gaiety of the occasion. Noteworthy among the patriotic societies, participating in the parade, were the representations of American Citizens of foreign birth. The parade was reviewed by Admiral King, U.S.N., Colonel Groninger, 11th Cavalry, Captain McCain, U.S.N., the three Mayors of the Peninsula Cities and Representative Stearns as honor guests of the city of Monterey.

During the holiday celebration, a gymkhana was held on the beach for the entertainment of the spectators. Six events of an entertaining nature comprised the program. The bucking barrel event furnished the greatest entertainment. Despite the fact that it might be reasonably expected that a cavalryman would be better equipped to win honors in this event the final result showed a sailor, a cowboy and a cavalryman tied for first place.

Congressman Joe Stearns, Member of the House Military Affairs sub-committee of the Appropriations Committee, of the House, paid a surprise visit to the post on the morning of July 4th. The Congressman was making an inspection trip of certain military posts with the objective of securing first hand information of existing conditions and needs. Colonel Groninger escorted the visitor to the reviewing stand where he witnessed the Independence Day parade, upon completion of which a tour of the post and the adjacent Camp Ord Military Reservation gave the Representative a comprehensive picture of existing facilities and installations. The stop-over at the Presidio, by Congressman Stearns, was made while en route to an inspection of the military establishments in Hawaii.

The Regiment returned to the Presidio of Monterey from the Annual Field Concentration and Inspection on the Camp Ord Military Reservation on June 11. The three weeks spent in combined field exercises with the 30th Infantry, 2d Battalion, 76th Field Artillery and the 82nd Observation Squadron were interesting and instructive. The last two days, were devoted to the annual inspection by the Corps Area Commander, Major General Albert J. Bowley. General Bowley expressed himself as well pleased with the readiness of the command for field service and the earnestness and sense of realism evident during the execution of the tactical exercises.

The Horse Show Team from the Presidio participated in the Sacramento Horse Show during the latter part of May, returning to the post after collecting eight first, eight second, five third and four fourth place awards. Captain Frank J. Thompson, Lieutenant Perry B. Griffith, Sergeant Sapash, Sergeant Neal, Corporal Marsden and Corporal Grossman represented the Regiment.

Major General Danford, Chief of Field Artillery visited the post on June 27 inspecting the 2nd Battalion, 76th Field Artillery. The 11th Cavalry participated in a mounted review, with the Artillery Battalion, as a courtesy to General Danford who was highly complimentary on the appearance and conduct of the Regiment in the review.

Changes in personnel of the Regiment, since the last issue of *The Cavalry Journal*, in addition to the arrival

of Colonel and Mrs. Groninger, the new Regimental Commander, noted above, are as follows:

Lieutenant Colonel and Mrs. W. H. W. Youngs departed for their new station at Fort Leavenworth, Kansas on June 15. Lieutenant Colonel and Mrs. Youngs were honored with a tea dance at the Officers' Club the afternoon prior to their departure. Lieutenant Colonel Youngs commanded the Presidio of Monterey during the period between the departure of Colonel Miller and the arrival of Colonel Groninger.

Major Paul G. Febiger, under orders to join the regiment, has been relieved from assignment and ordered to CCC Duty at Sacramento, California.

First Lieutenant and Mrs. Perry B. Griffith, 11th Cavalry, departed on July 10th on leave prior to reporting to the Cavalry School where Lieutenant Griffith is detailed as a student for the 1938-1939 Troop Officers Course.

12th Cavalry, 2d Squadron— Fort Ringgold, Texas

LIEUTENANT COLONEL F. C. V. CROWLEY, *Commanding*

On March 16, 1938, the Squadron departed for Fort Clark to add its bit to the Brigade organization tests. This bit became more and more in evidence as the tests progressed for the squadron "clicked" time after time, resulting in many expressions of commendation from those in a position to observe. And down the pike to Balmorhea through a miserably, cold combination of a dust storm and a howling wind. Despite this concerted attack by the elements, the morale of the squadron remained at a point unbelievably high. The permanence of this admirable attribute was demonstrated by the conduct of the men while in highly mobile camp at Toyahvale where a restless Texas was continually on the move.

The squadron made a very creditable showing in the horse show held at Toyahvale for the Division, in the enlisted classes, garnering three first places and two second places as follows:

CLASS A JUMPING

1st —Corp. Lewis, Troop E, on *McAllen*.

2d —Corp. Nagle, Troop F, on *Skip*.

OPEN JUMPING

1st —Sgt. Smith, Troop E, on *Nettie*.

MOUNTED WRESTLING

1st —Pfc. Odes Wright, Troop F.

EGG AND SPOON

2d —Pfc. Charles Farmer, Troop F.

In the other athletic events scheduled, the squadron joined hands with its mates from Fort Brown to take a prominent position.

The Division Review and the long trek back was accomplished with the highest of spirits. The rigors of the field had long since become routine and the marching rapid. The squadron arrived home at Fort Ringgold on

May 26th to be greeted by an almost completely changed post with its improvement accomplished by the W.P.A., too numerous to mention; under supervision of the efficient guidance of Major Joe C. Rogers, Q.M.C.

Since return of the squadron, the troops immediately engaged in annual target practice which must be completed prior to departure of the squadron for the 3d Army Maneuvers to be held at San Antonio, Texas, soon after August 1st.

Lt. Colonel William G. McKay, Medical Corps, was assigned to Fort Ringgold, effective June 1, 1938, but having been granted a leave of absence for three months, is not expected to report for duty until about September 1st.

Captain Charles V. Bromley, Jr., Cavalry, was assigned to Fort Ringgold, Texas, upon completion of the Infantry School at Fort Benning, Georgia, on June 16th. He was granted a leave of absence of fourteen days and will report for duty about July 1st.

Major Arthur W. Drew, Medical Corps, will be relieved from duty at this station on July 22, 1938, to take advantage of a one month and nine days' leave of absence prior to his retirement for disability on or about August 31, 1938.

Orders have been received assigning Major McFarland Cockrill (formerly General Staff Corps at Fort Bliss, Texas), to this station effective August 10th.

12th Cavalry (Less 2d Squadron)— Fort Brown, Texas

COLONEL DONALD A. ROBINSON, *Commanding*

The regiment returned to Fort Brown and Fort Ringgold, May 26th and May 27th, having been absent from its home stations since March 16th.

The movement to Fort Clark, a distance of 382 miles, to concentrate the 1st Cavalry Brigade was accomplished by rail transportation of animals and impedimenta and motor convoy for personnel. At Fort Clark the Brigade was employed for two weeks in testing various types of regimental organization. It was then provisionally organized as a regiment for test purposes and as such marched to Toyahvale, Texas, between April 5th and 26th, where the 1st Cavalry Division was concentrated for the Cavalry Division Test Maneuvers.

The return march to Fort Clark was made under normal Brigade organization during the period May 11th to 24th. The movement of the 12th Cavalry from Fort Clark to home stations on May 26th and 27th, was accomplished by rail and motor transportation.

Strongly in evidence during the period of field service was the high state of training existing in all elements of the Division, the fine spirit of coöperation manifested by the personnel of the 5th Cavalry and 12th Cavalry while serving together either under the normal brigade organization or as one provisional regiment, the high morale of the Division under all conditions, and the excellent condition of the horses. The 12th Cavalry went through the

entire march and maneuver period without the permanent loss of a single animal. The latter indicates the saving in horse flesh made possible by the use of the present semi-trailers which facilitate prompt and easy evacuation of sick or injured animals.

In connection with post improvement the Resaca (lake) has been drained and thoroughly cleaned for the first time known to the oldest inhabitants of Brownsville.

All gar and turtles, both of which are destructive of food fish, have been destroyed. The shores have been terraced and replanted with grass. A supply of bass and bream has been assured and with stocking of the Resaca with game fish the followers of Isaac Walton should have plenty of sport within a few years. In addition, areas have been deepened to provide swimming pools and the trees and shrubs, recently planted, lend considerably to the park effect given by this section of the post.

Training during June and July included reconditioning for field service, small arms marksmanship for the 1st Squadron and conditioning of personnel and animals of all organizations for participation in the Third Army Maneuvers north of San Antonio in August.

Recent and prospective changes in post personnel:

Departures:

Major Theodore M. Roemer, Cavalry, to leave and Organized Reserve duty at Altoona, Pa., June 15, 1938. Captain Gordon S. Armes, detailed to Adjutant General's Department, July 1, 1938.

First Lieutenants John W. Darrah, Jr., and Richard A. Smith, Cavalry, to leave and Cavalry School, July 5, 1938.

Lieutenant Colonel Josiah W. Worthington, Veterinary Corps, to leave and duty at Fort George G. Meade, Md., July 15, 1938.

Chaplain Harold H. Schulz, to leave and Philippine Department, July 25, 1938.

First Lieutenant David W. Clotfelter, Medical Corps, to leave and Philippine Department, July 25, 1938.

Arrivals:

Second Lieutenant John B. Nance, Cavalry, reported.

Second Lieutenant Edward C. D. Scherrer, Cavalry, reported.

Captain James H. Walker, Cavalry—about July 10, 1938, from Fort Leavenworth.

Captain Albert W. Shiflett, Medical Corps—about July 8, 1938, from Army Medical Center.

Major Olin C. Newell, Cavalry—about July 18, 1938, from Fort Meade, S. D.

Lieutenant Colonel Clifford C. Whitney, Veterinary Corps—about October 1, 1938, from Panama.

Major Jay K. Colwell, Cavalry—about October 1, 1938 from Philippine Department.

13th Cavalry—Fort Knox, Kentucky

COLONEL CHARLES L. SCOTT, *Commanding*

During the period May 20-May 25, the regiment participated in the march of the 7th Cavalry Brigade from

Fort Knox to Fort Oglethorpe, Georgia and return. Distance covered, 650 miles. There was a tactical situation throughout the march which culminated in an attack at dawn on May 25th against the 10th Infantry Brigade occupying the Fort Knox reservation. On May 22d, during the Sunday lay-over, at Fort Oglethorpe, officers of the 1st and 13th Cavalry took part in a polo game against the 6th Cavalry, in which the mechanized cavalrymen put up an exceptional fine game as far as team work was concerned, however, they have become so used to looking for holes to avoid with vehicles that they couldn't keep their eyes on the ball and were defeated.

In the march to Fort Oglethorpe the maintenance in the regiment and, in fact, throughout the brigade was of the highest order. All the vehicles of the 13th Cavalry, except one combat car which was sent back to the post before it had gone 16 miles en route to Fort Oglethorpe, completed the entire march under their own power and participated in the final attack on the 25th of May. The march to Fort Oglethorpe also "shook the men down into the saddle so to speak" and there is noticeable improvement in driving, particularly in combat car troops.

The 13th Cavalry is now fully equipped, the Mortar Mounts having arrived several weeks ago. In the weekly regimental problems, the 1st and 13th Cavalry are working against each other with full equipment. Interest in this work is high and exceedingly valuable experience is being gained. Night operations are being stressed in all tactical exercises including the troop, squadron and regiment.

Troop "B," 13th Cavalry won again this year the Post, troop, battery and company baseball championship, after defeating the winner in the 1st Cavalry, 68th Field Artillery and Special Troops. The regimental championship series is now under way.

26th Cavalry (PS)—Fort Stotsenburg, P. I.

COLONEL CLARENCE A. DOUGHERT, *Commanding*

The regiment continued its annual target practice during April and May. Little other training was conducted though considerable time was spent on construction work to improve the water supply and roads of the post. The new post commander, General W. S. Grant, relieved General E. H. Humphrey on May 11, 1938.

Majors R. P. Gerfen, J. V. V. Shufelt, P. C. Febiger, Captains Z. W. Moores and M. F. Sullivan left on the May transport.

The 26th Cavalry Polo team representing Fort Stotsenburg won the annual play for the Selph Cup at the Manila Polo Club on May 13th. The team, consisting of Captains W. H. Barnes, Z. W. Moores, L. R. Dewey and Lieutenant C. E. Combs, won from an all Manila team by a score of 6 to 5 in an extra period. The same team, with Captain Paul A. Ridge and Lieutenant C. A. Lichirie as substitutes, representing the 26th Cavalry won the Day Cup the same week without being scored on during the tournament.

At the Manila Polo Club Horseshow on May 14th the 26th Cavalry won the following places:

CLASS II—HUNTERS		
Place	Horse	Rider
3rd	Colonel	Capt. Paul A. Ridge
4th	Kruger	Lieut. C. A. Lichirie

CLASS IV—PAIR JUMPING		
Place	Horse	Rider
1st	Nick Tony	Capt. W. J. Bradley
	Speed King	Lieut. C. A. Lichirie
4th	Colonel	Capt. P. A. Ridge
	Bliss	Capt. L. R. Dewey

CLASS VI—OPEN JUMPING		
Place	Horse	Rider
2nd (tied)	Colonel	Capt. P. A. Ridge
3rd	Bliss	Capt. L. R. Dewey
4th	Speed King	Lieut. C. A. Lichirie

Troop "B" is leading the Regimental Soccer League started in May and is apparently on its way to displace last year's champions Headquarters Troop.

Major's J. R. Finley, P. C. Clayton, Captain N. M. Winn, Lieutenants J. J. La Ppage, J. P. Rhoades and C. P. Walker arrived on the May transport.

66th Cavalry Division

Some 43 reserve officers, Cavalry, and three enlisted reservists, the latter candidates for commissions in the reserve Corps, underwent active duty training at Fort Riley, July 3-17, 1938, under the command of Lieutenant Colonel Harold Thompson, Cavalry (DOL), unit instructor for reserves at Kansas City.

Too great tribute cannot be paid the officers and enlisted men of the Second Dragoons for the splendid manner in which they cooperated with Lieutenant Colonel Thompson and the reserves, in furnishing troops, animals, range, and other instruction details. Most notable was the constant and genuine cheerfulness and courtesy for which the 2d U. S. Cavalry became so well known to reserves and state troops alike in the years past. It is some test of enlisted men's devotion to duty to turn out saddled animals at nine p.m. for a night route march, and to have that spirit still genuine in the caring for animals and equipment at one o'clock the following morning; an isolated illustration of spirit.

The reserves wish through these columns to express their continued appreciation to Colonel Arthur J. Holderness, his officers and enlisted personnel for the regiment's traditional interest in the reserves as a part of the "Three-Part-Army."

Among those attending the Seventh Corps Area Cavalry Reserve Officers' supper at the Polo Bungalow, July 14th, were, Colonel Dorsey Rodney, formerly commanding officer, 2d U. S. Cavalry, now member of The Cavalry Board; Lieutenant Colonel Terry Allen, Cavalry; Major E. E. Schwien, Cavalry; Lieutenant J. O. Curtis,

Jr.; Major Roy Craig; Major C. W. Burkett, instructor at St. Louis; and Colonel (United States Senator, Missouri) Harry S. Truman, FA-Res., who refused any status not normally accorded a reserve colonel; Captain G. B. Rogers, Captain H. R. Westphalinger, and others of the second regiment.

The most exacting test of aptitude for reserves was the cross-country night march, conducted by three reserve field officers, Majors T. C. Swanson, Ed. H. Brown, and A. W. Morse. Barring three cincha bruises, and one mild lameness, all animals were returned in condition acceptable to Lieutenant Colonel Thompson. With regulation halts, the march, twenty miles was finished in four hours. One adverse comment of "Skipper" Thompson was that there were enough flashlights in use to blind the Navy.

103d Cavalry—Tyrone, Pennsylvania

COLONEL BENJAMIN C. JONES, *Commanding*

On July 2d the 103d Cavalry ended its two weeks period of intensive field training at Indiantown Gap and all the units of the regiment are now settled again at their home stations. With regimental headquarters at Tyrone, five troops and the Medical Detachment at Philadelphia, the Band at Northumberland, and one troop each at Sunbury, Lewisburg, Lock Haven, Bellefonte, DuBois and New Castle, the regiment is now pretty widely scattered. But the time and space factors have always been well appraised and handled, and little difficulty is experienced in the administration and training of the regiment whose area encompasses the entire width of the state.

The field training period just closed was beyond doubt the most successful and profitable ever undertaken by the regiment. In every activity instructional value was emphasized. The training hours were long and afforded plenty of opportunity for deliberate and repeated execution of training exercises. The net result was pronounced progress in every echelon of the command.

One of the highlights of the period was a three-day march and bivouac exercise. This called for movement of troops from the camp area on separate marches and missions, each troop being assigned an area some sixteen or seventeen miles from camp in which it had to find and establish its own bivouac. This movement was accomplished by each troop and the troop settled in bivouac by early afternoon of the first day; and thus ended the first phase of the exercise.

The second phase of the exercise involved the assembly of troops into squadron bivouac under cover of darkness. In this phase movement of troops was not commenced until night and the assemblies were executed with efficiency and speed. Then all units settled down to a measure of comfort until mid-afternoon of the second day; and thus ended the second phase.

The third phase of the exercise began at 3:00 o'clock on the afternoon of the second day when orders came to

the regiment, which theoretically was screening the advance of an infantry division, to secure a line some seventeen miles to its front to protect the further forward movement of the infantry. Shortly the regiment was on the march and well before darkness had fallen was holding the ground whose occupancy was necessary to the accomplishment of this mission. In the course of the march some enemy patrols were encountered but there was no determined resistance offered.

Opposing the 103rd Cavalry, as developed later, was an enemy brigade of which one regiment was actually on the ground and the other theoretically represented. Shortly after dawn on the third day when outguards had been driven in and the intention of the enemy to advance was evident, the strength of the enemy was disclosed. This led the regimental commander to decide upon delaying action.

The ensuing six hours of battle was stirring. The 2nd Squadron, holding the right sector on the first delaying position was driven back. Major George W. Schubert, commanding this squadron, executed the withdrawal admirably, utilizing intermediate delaying positions to the utmost. His rearward movement from his last intermediate position was executed just in time to avoid an envelopment by the advancing enemy.

This enemy enveloping force came to serious grief, for it moved straight across the front of the 1st Squadron which under Major Kirk Swing had occupied advantageous ground selected for the second delaying position. For three hours the 1st Squadron held its ground against repeated attacks of the enemy. The 3rd Squadron which occupied the left sector of the regiment covered its own withdrawal in good fashion from the first to the second delaying position. During this time the 2nd Squadron was assembling on the ground which had been selected for the third delaying position in event that Major Swing should be forced back.

But no occupancy of this position was necessary. The enemy, defeated on the left flank, sought to envelop the right flank of the 1st Squadron. The opportunity presented itself thereupon for an effective counter-attack by the 2nd Squadron against the enveloping force. The order was issued for the counter-attack and the 2nd Squadron was on the march when the exercise terminated. Thus ended the third and last phase of one of the most valuable exercises from an instructional point of view ever undertaken by the regiment.

A second highlight of the camp was the achievement of the representatives of the regiment in the annual Pennsylvania State Rifle Matches. These were held at Indian-town Gap on the first two days of the camp period. Individuals and teams from all the combatant regiments of the Pennsylvania National Guard competed. The 103d Cavalry representatives won the individual rifle championship, the individual pistol championship, the team pistol championship, and rated third in the team rifle competition. The individual rifle champion of the Pennsylvania National Guard is 1st Lieutenant Joseph M. Williams of

Troop C. The individual pistol champion of the Pennsylvania National Guard is 1st Lieutenant Robert R. Love of Troop I. The regimental team which won the team pistol championship comprised 1st Lieutenant Joseph M. Williams, 1st Lieutenant John R. Dey, 1st Lieutenant Robert R. Love, Sergeant William G. Guyer and Sergeant R. L. Nelson. At retreat parade on Wednesday, June 22nd, formal presentation of the trophies and medals for these achievements was made to the winners by the regimental commander.

An activity of the period which won high popularity throughout the regiment and well deserved acclaim to the winners was the noncommissioned officers' night ride held on Thursday night, June 23rd. Entries were in teams, two noncommissioned officers in each case riding as a pair. There were thirty-two entries, a total of sixty-four noncommissioned officers competing. The course was some twelve miles long, part of it on highway and part of it cross-country. At each of the six check stations a radio was installed which reported to the starting point the arrival of each entry. A large score board placed at the bandstand in camp indicated to the watchful crowd the progress of the various teams. The winning team finished the ride in one hour and forty minutes. Within two and one-half hours from the starting time twenty-four of the thirty-two teams had completed the ride and checked in. The remaining eight teams, all of which had reached most of the stations but none of which had checked in at all of the stations, completed the ride and the last team was checked in at camp within three hours after the start of the ride. Veterinary officers checked condition of the horses at all the stations and no team was disqualified because of the condition of its mounts. At retreat parade on Saturday evening, June 25th, trophies and cash prizes were presented to the winners by the regimental commander. The winners were as follows:

First: Sergeant John A. Goodwill, Corporal Anthony Bruno, Troop B.

Second: Sergeant Karl E. Vang, Corporal John H. Krauter, Hq. Troop.

Third: Sergeant Jesse A. Laws, Corporal Thomas J. Green, Troop C.

Fourth: Sergeant Robert Crowthers, Corporal Edward Rothfeld, Troop B.

Quite a volume could be written on the other activities of the regiment. But all of this must remain for fire-side chats, for too much space cannot be taken here. Suffice to say that the platoon, troop and squadron exercises involving march, reconnaissance and attack were generally well conducted and executed. The platoon firing problem was well coordinated and well carried through, and the resultant scores in field firing attested to the high calibre of marksmanship of all the units. The Machine Gun Troop, both in its march exercise and in its field firing exercise operated like a well oiled machine and repeated its high class performances of a year ago.

Particular attention was given to the care of animals and to horseshoeing; and as a result, on a quite arduous

three day march, only three horses had to be evacuated. It is felt that the regiment has made marked progress in the past year in the care and conditioning of its animals.

Ceremonies held a popular place in the activities of the command. On Sunday, June 26th, as part of the 52nd Cavalry Brigade, the regiment performed creditably in the annual mounted brigade review. Every evening, weather permitting, there was held either a retreat parade or a pass-by. Neatness and smartness in appearance have become traditional in the regiment, and this tradition was lived up to this year. The observance of military courtesy has become within the whole command a matter as much of pleasure to members of the regiment as it is of military regulation. Discipline and courtesies are not difficult when soldiers accept so willingly the principles of military organization which call for their maintenance.

Now the 103rd Cavalry is launched into a new Armory Training Year, which promises great activity and keen interest to every officer and man—and, it is hoped, progress equal to that of the past twelve months.

112th Cavalry—Dallas, Texas

COLONEL. WALTER B. PYRON, *Commanding*

Anyone wandering, over hill and dale, along creek bottoms, and dirt roads, across country, and over rivers, in the general area north and west of Dallas, on the dark night of 25-26 June, 1938, would have encountered determined individual horsemen of the 112th Cavalry, with flashlights, compasses and maps, all bent on winning the regimental night ride held that date.

Twelve officers and thirty-four noncommissioned officers competed in this event which was a real test of individual ability to cover a long distance, under the cover of darkness, at the rate of march prescribed, and accomplish the reconnaissance mission assigned.

Two separate rides were conducted, one for the officers, and one for the noncoms. Both rides accomplished their purpose, which was to test the endurance, ability and training of each officer and noncommissioned officer, acting alone, in finding his way at night, in a strange country, in minimum time allowed by the conditions.

Colonel Walter B. Pyron, the instigator of this night ride was much gratified with the results it produced from a training standpoint. Colonel Pyron, in order to be with us on this occasion, gave up much of his valuable time and made a long flight by airplane. He was particularly pleased at the spirit and enthusiasm displayed by all contestants and the fact that the first consideration of every rider was his horse. This was proven by the condition of all horses at the finish of the ride. They covered a hard gruelling course on a hot night, but due to the care by their riders, all finished in excellent shape.

In the Officers' Class, Captain William T. Starr was first, 2d Lieutenant William R. Shaw was second, and 1st Lieutenant Forrest M. Cowman was third. The scoring was very close, but the above three named officers nosed out the others by a close margin. (See cut.)



Top—Winners of the Officers' Ride. Left to right: Captain Starr, first place; Lieutenant Shaw, second place; Lieutenant Cowman, third place.



Bottom—Winners of Noncommissioned Officers' Ride. Left to right: Corporal Kirk, Troop E, first; First Sergeant Campbell, Troop A, second; Corporal Stallings, Machine Gun Troop, third.

Corporal Jack Kirk, Troop E, was first in the non-commissioned officers' ride, 1st Sergeant Herbert D. Campbell, Troop A, was second and Corporal Jesse D. Stallings, Machine Gun Troop, was third. (See cut.)

It is worth mention that every officer and noncommissioned officer who entered in the ride, after riding all night, were on deck for drill with their organizations on Sunday morning. This shows a devotion to duty beyond that expected.

On July 17th, the regimental commander ordered a test mobilization and immediate turn out for field service of all units of the regiment. This came as a complete surprise to the staff and troops.

At 2:30 AM, Colonel Pyron had the alarm sounded. All troops were ordered to mobilize at once and be prepared to take the field on a State emergency. The staff was informed that it would be a truck movement and that sufficient trucks were en route from Austin to entruck the entire regiment.

This mobilization and preparation for field service was carried out by all concerned in a most efficient manner and in a minimum time. The staff immediately assembled at regimental headquarters, opened the CP, and put the mobilization plans into effect, also prepared plans for the truck movement and supply of the regiment for the contemplated move. In the meantime the squadron and troop commanders were on the job, opened their CP's, assembled their men and prepared their equipment A for truck movement.

The average time for all troops and detachments of the regiment to report their organizations ready to move was 2 hours and 47 minutes. This was excellent time when one considers that the men are scattered over the whole city of Dallas and they cannot be notified in a minute that mobilization is in effect. It also takes time for the men to get to their organizations.

The remarkable time made in this mobilization was due to the efficient alarm system in vogue in this regiment.

The system is as follows: Each troop commander, immediately notifies his lieutenants and first sergeant by phone. The lieutenants immediately call their sergeants and corporals, who keep the phone numbers of all the men in their respective squads. They in turn immediately call their men. By this system many phones are working at the same time, which is not the case when all the calls go out from the troop phone.

In the mobilization of the regiment on July 17th, as each troop reported ready to move, Colonel Pyron ordered the troop commander to prepare his troop for a show-down inspection of all organization and individual equipment. He then proceeded with his staff and went through that troop with a "fine tooth comb" to check the completeness and condition of all equipment. Check lists had been previously prepared by the staff. Troops were inspected in the order they reported readiness to move. Upon the completion of the show down inspection units were notified that the turn out was for training purposes only, and were dismissed. Up to that time all believed that the regiment was going into the field.

It is believed that this mobilization accomplished the following purposes: It tested the alarm list of each troop and determined just how long it will take each organization to mobilize and be ready for field service. It gave the regimental commander a definite check on the state of preparedness of all his units for immediate field service, and the status of individual and organization equipment for camp this summer. It was excellent training for the staff and troop officers in their duties and functions on mobilization. (Many problems arose that will be of untold value to all concerned in future mobilization.)

In order that the mobilization would be complete for the

entire regiment, Colonel Pyron ordered Lieutenant Colonel Clarence E. Parker to mobilize and inspect Troop F, at Tyler, Texas, and Major William P. Cameron, to do the same for the Medical Detachment at Mineral Wells, Texas.

115th Cavalry—Cheyenne, Wyoming

COLONEL R. L. ESMAY, *Commanding*

For the first time in more than fifteen years the 115th Cavalry is encamped away from the Polo Mountain Reservation west of Fort Francis E. Warren. Camp opened June 11th at Guernsey, Wyoming, on property being purchased by the State.

In camp, also for the first time, is the 24th Cavalry Division staff, Major General . . . Herndon, commanding. Colonel Burke H. Sinclair, Chief of Staff of the Division, has returned to Wyoming for the camp. He commanded Wyoming troops in the World War, formerly commanded the regiment and the 58th Brigade which is composed of the Wyoming and Idaho, 116th Cavalry, regiments.

Major General . . . Blanding, Chief of the National Guard Bureau, together with other Bureau officers, flew into Cheyenne on June 13 to visit the camp. It is the first time that the Wyoming camp has been visited by a chief of bureau. Among other guests expected is Brigadier General E. D. Peek, commanding Fort Warren.

Among Regular Army officers detailed with the camp are Major Carlisle B. Cox, senior instructor who succeeds Major E. C. Godbold who died several months ago; Captain C. W. Fake, junior instructor; Major L. A. Sprinkle, division instructor and Major F. C. DeLangdon, camp inspector.

Field problems will be conducted over the same terrain across which the troops from Fort Laramie once rode and fought.

The town of Guernsey had cooperated wonderfully in connection with the new camp site. The annual water carnival at Lake Guernsey has been widely advertised in previous years but it will share honors with the National Guard encampment this year. The camp is more accessible than that at Pole Mountain and it is believed that the Guard will profit from the large number of visitors who will see it in action for the first time.

124th Cavalry—Houston, Texas

COLONEL CALVIN B. GARWOOD, *Commanding*

We have done it again! The Pershing Trophy, which is coveted by all military organizations, adorns the walls of these headquarters for the third consecutive year. The Colonel is receiving congratulations for this extraordinary showing of the regiment. This award is the result of all troop commanders cooperating to be sure that their individual troopers had the proper training before firing the .30 caliber rifle. We know that we are on the spot for

next year, but if enthusiasm is any indication, we predict that the trophy for 1938 will be among our treasured possessions.

At a recent officers school, the drinks were poured by Lieutenant Colonel Willoughby, who has recently received his promotion from the rank of Major. Colonel Willoughby is well known by the brigade, he being our unit instructor for a period of two years. He is always willing to lend a helping hand, and his many friends will be happy to learn of his promotion—"bottoms up for the Col."

Colonel Garwood and his staff were invited to attend a conference in San Antonio last week held by the 36th Division Commander, Major General Burkhead, for his staff and officers. The 56th Cavalry Brigade will work with the 36th Division on the Third Army maneuvers to be held in the early part of August. The Colonel deeply appreciated the invitation and attended with his entire staff. Meetings of this kind assure better coöperation and understanding during the maneuvers.

Reports from the Troops indicate that much hard riding and tactical problems will be in order at drills between now and camp, as practically all units have finished their work on the range. Hats off to Troops "A" and "E" for having their reports in the first ones. Let's see the others follow suit.

"E" Troop at Brenham, reports that they will have an overnight conditioning ride early this month, and that they also have a playground ball team which stands second in the league. Here's hoping that on the next report they will be first.

"A" Troop reports that they will be "ready," and we are counting on them. This troop has made remarkable strides since it has been commanded by Captain John F. Burton Lyons. More power to them.

The results of the regimental competition in the sub-caliber rifle which was arranged for the individual squads and platoons in the regiment were very gratifying to the regimental commander, and are bound to reflect in the marksmanship reports this year. The results were as follows:

Platoon Competition: Staff Platoon Headquarters Troop, 916 points; Second Platoon "F" Troop, 896 points; M. G. Platoon Troop "E," 866 points; First Platoon Troop "A," 866 points.

Squad Competition: 2nd Squad M. G. Platoon, Troop "A," 712 points; 6th Squad Troop "F," 704 points; 5th Squad Troop "E," 602 points.
Hats off! To the winners.

305th Cavalry—Philadelphia, Pa.

COLONEL VINCENT A. CARROLL, Cav.-Res., *Commanding*

On May 22 our Regiment held its Third Annual 305th Cavalry Equestrian Games on the estate of Alfred A. Biddle at Newton Square, Pennsylvania. This year we tried an innovation in the form of having an invitation show rather than the usual open entries.

We decided to combine the Horse Show events with a regimental picnic. Before lunch we had a rather interesting Hunter Trial over a course of about one and one-half miles of natural hunting country. A recess was called while the Regiment and their guests participated in a picnic lunch. The afternoon events were a second class of 800 yards over various obstacles, and the third class, the finals in the Hunter Trial.

Unfortunately, none of our regimental mounts got first place in any of these events, but honors went to Lieutenant Gentle, who rode his own horse, *Tess*, the only horse to win two ribbons.

It was decided after the show that in the future we hope to keep the show on an invitation basis as it was generally conceded that this, the Third Annual Show, was by far our most successful.

The inactive duty training for the year is over and much credit should go to the executive officers who spent many hours instructing on the fine points of C.M.T.C. training that thirty-nine of our officers have applied for this summer. They are going in three groups to Fort Belvoir, Virginia, where they feel that the training for not only themselves but also the C.M.T.C. boys will be admirably handled due to the excellent living conditions and fine opportunity for terrain exercises offered at this new post.

Lieutenant Forrest H. Riordan, Jr., has just returned from Fort Riley where he satisfactorily completed the Cavalry School course. He is most enthusiastic about it, and is the envy of all officers who are not able to take advantage of this most valuable course of training. Lieutenant Riordan apparently has the proper Cavalry spirit, having ridden eighteen miles with a broken ankle, to finish second, after a fall in the early part of the Night Ride.

Headquarters has just reported the promotion of Captain Edward A. Town to Major. He is to be congratulated on his well-deserved promotion.

306th Cavalry—Baltimore, Maryland

COLONEL MATTHEW F. JAMES, *Commanding*

The last Inactive Duty Conference for the season 1937-38 is now history, and all thoughts are turned toward the Belvoir Campaign of 1938.

The Baltimore group, during May and June, heard interesting as well as instructive lectures from Lieutenant Colonel Paul R. Hawley, of the Army Medical School, on "The Medical Service"; Colonel Simon B. Buckner, C. O., 66th Infantry (Lt. Tanks), on "Tactics of the New Tank"; Major Hugh W. Rowan, Chemical Warfare School, on "Defense Against Chemical Warfare." On June 22nd, Lieutenant Colonel Harry MacE. Pendleton, from 62nd Cavalry Division Headquarters at Towson gave a critique on the Staff Exercise which was held at Towson from December to May to all officers who had participated in the Staff Exercise. All other officers attended the general conference given by Major Chas. A. Keck, Assistant C. A. Ordnance Officer, on "Mobilization." These conferences adjourned in time so that all

could hear the Louis-Schmeling fight. Conferences were given by Lieutenant Graham Dukehart on "Combat, Command and Liaison Missions of Scout Cars"; by Colonel H. W. Baird on "Mechanized Cavalry," which Colonel Baird followed with a problem on the same subject at the next conference.

The following promotions and reassignments have been made within the Regiment: Major V. J. Blondell was promoted from Captain and relieved from his assignment as Regimental S-1 and S-2, and assigned to the First Squadron, as Commanding. Major Edward A. Kane was relieved from the First Squadron, as Commanding, and was assigned to the Second Squadron, as Commanding. First Lieutenant Graham Dukehart was relieved of his assignment to Headquarters, First Squadron as S-1, and was assigned to Regimental Headquarters as S-1; Second Lieutenant Thomas E. Jarman, Jr., was relieved of his assignment to Headquarters, Third Squadron as S-4 and was assigned to Headquarters, First Squadron as S-1. Lieutenants James H. Anible, Roue L. Hogan, Frederick P. Knoll, Gilbert B. Layton, Bernard Rubenson were recently assigned to the Regiment and Lieutenants Mason V. de Castle and Wilbur W. Hiehle were relieved.

The Regimental Commander, Colonel Matthew F. James was elected President of the Department of Maryland, Reserve Officers Association at the May convention, and Major V. J. Blondell as Vice President. At the June meeting of the Baltimore Chapter, Reserve Officers Association, the Regimental Executive Officer, Lieutenant Colonel Wm. H. Skinner was elected President of the Chapter and Lieutenant Graham Dukehart was elected as one of the Vice Presidents.

The 2nd Squadron had during this period the good fortune to hear the Commanding Officer of the 3rd Cavalry, Colonel J. M. Wainwright, lecture on "Cavalry Marches." (What would we do without our old friends from the 3rd?) Colonel W. W. Gordon gave us an insight into "The New Cavalry Division." Captain W. I. Irby gave a conference "Offensive Combat—Cavalry Against Cavalry." The regular equitation classes at Fort Myer, Va., were discontinued at the end of May because of the heavy demands made on the Regular Army personnel at Fort Myer this spring. The mild weather which prevailed during the winter enabled the Regiment to participate in a greater amount of outdoor activity. This enabled the personnel to attain a higher degree of training in several lines than has been possible in preceding years.

On the evening of May 26th the Regiment held the annual spring dinner and dance at the Army and Navy Country Club, which was as usual a very brilliant affair.

After a delightful dinner, fifty couples danced to the music of one of Washington's most popular orchestras until the wee small hours. It was greatly regretted that the Regimental Commander, Colonel Matthew F. James was unable to attend, and in his absence the honors as toastmaster were carried off in a very capable and entertaining fashion by the Executive Officer of the Regiment, Lieutenant Colonel Wm. H. Skinner. At this party, members of the Regiment reluctantly bade farewell to Lieutenant Colonel John C. Mullenix and Mrs. Mullenix. Lieutenant Colonel Mullenix, who has been Unit Instructor of the Second Squadron for the past three years, has by his ability as an instructor, his friendliness, and his sterling character won a high place in the regard of all officers of the Regiment. He has been transferred to the Air Corps Tactical School, Maxwell Field, Montgomery, Alabama, and leaves with the affection and best wishes of the entire Regiment.

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308th Cavalry—Pittsburgh, Pennsylvania

COLONEL GEORGE H. CHERRINGTON, Cav.-Res.,
Commanding

The 308th Cavalry has just completed one of the most successful school years in its history. Attendance at conference averaged more than seventeen officers—about five per conference more than two years ago. In view of the fact that there are only about thirty officers near enough to take advantage of the conferences, this is considered an exceptionally good attendance. Attendance at mounted instruction has also been excellent. The limited number of horses available has a decided effect on the attendance. Ordinarily all horses which are serviceable are used each period.

Applications for active duty this summer were more numerous than for several years. Officers qualified earlier than usual and the majority had many more than the minimum number of required credits.

Not only have the professional features of the regiment improved, but also the social features. During the spring and early summer many informal parties have been held at the training center. The parties usually take the form of steak or wiener roasts and are well attended and enjoyed. Families as well as the officers attend.

There are now three ladies riding classes being conducted by officers of the regiment. Each class is held once per week in the evening. The newly installed lights on the drill field permit later starting and longer periods. This activity provides good opportunity for practice in instruction.



An R.O.T.C. Forced March

For some years that portion of the Massachusetts State College R.O.T.C. undergoing required field training at Fort Ethan Allen, Vermont, has marched to that post and returned by marching to Amherst. The distance is about two hundred miles each way. Usually ten marches are utilized northbound and nine southbound. On the northward march the unit is commanded, and each march conducted, by an officer on duty with the military department. Students observe his methods closely since on the return march they themselves furnish the unit commander in addition to the squad leaders and platoon sergeant.

The return march this year encountered an unusual amount of rain which resulted in an accomplishment which is considered to be a possible marching record for R.O.T.C. cavalry.

On Saturday, July 23, the unit left its camp three miles northeast of Wilmington, Vermont, at 7:00 A.M. en route to its next camp at Colrain, Massachusetts, distance 23 miles. Prior to arrival at Colrain heavy showers were the rule, and on arrival at 11:15 A.M. a wet camp was in prospect with no opportunity of drying out. Horses were cool and fresh. Under these circumstances some enthusiastic students asked consideration of the idea of continuing the march to home station, 29 additional miles. Major Leo B. Conner, Cavalry, who accompanied the unit, agreed, and the plan was approved by the P.M.S.&T. The unit trucks had preceded the command; the kitchen was in operation with noon meal under way; picket line had been erected. Horses were tied to the line, unsaddled, groomed, with special attention to the legs, watered, and fed. The unit was served its usual mid-day dinner. At 1:15 P.M. the march was resumed and Amherst was reached at 7:00 P.M. with students and horses in excellent condition. The platoon commander of the day was Cadet

R. L. Foster, Class of 1939, who took entire charge; the only instructions given him were those incident to procedure at the mid-day halt. Total distance marched on July 23 was 52 miles. An inspection on July 24 showed animals in normal condition.

Culver Military Academy

Major W. J. O'Callaghan, Specialist Reserve, U. S. Army, composer of the stirring Sixth Cavalry March, and bandmaster of the army band which played the Star Spangled Banner at the surrender of Santiago in 1898, will be retired from the staff of the Culver Military Academy this summer after twenty years of faithful service, it has been announced by Brigadier General L. R. Gignilliat, Academy superintendent.

Major O'Callaghan, who held the rank of colonel and master instructor on the Culver staff has been head of the music department and tactical officer of the cadet band since 1918. He was educated in Germany and served for twenty-three years as bandmaster of the Sixth United States Cavalry. With the Sixth Cavalry he served in Cuba during the Spanish American War, in China during the boxer rebellion, and in the Philippines during the insurrection.

On June 15, Colonel O'Callaghan was awarded the honorary degree of Doctor of Music in recognition of his efforts in behalf of the musical arts by the Boguslawski College of Music of Northwestern University. During the current commencement week at Culver, Colonel O'Callaghan was made an honorary Life Member of the Culver Legion, the alumni association, and was signally honored at the commencement exercises by being passed through the "Iron Gate." This honor in the past has been reserved only for members of the graduating classes.

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